

EXPLORING THE ROLE OF MINDFULNESS IN SUPPORTING TEACHERS IN A SOUTH AFRICAN SCHOOL

by

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DECLARATION

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ABSTRACT

The practice of mindfulness is proliferating internationally as a tool for professionals to become more effective at managing stress and to optimise their performance. In South African school settings in particular, the utility of mindfulness is an under-researched topic. This research aimed to begin to fill that gap by exploring the effects of a Mindfulness-based Intervention on a group of teachers. It used an exploratory mixed-methods study with a sample of eleven teachers that participated in a mindfulness programme over a nine week period. A pre-test and post-test questionnaire as well as a focus group collected quantitative and qualitative data from the participants before and after the programme was carried out to determine whether the intervention had a statistically significant effect on the teachers' levels of mindfulness and compassion toward students; as well as to develop a deeper understanding from the teachers of the process of acquiring mindfulness skills.

The levels of compassion towards students remained fairly consistent, with no significant changes reported. However, significant results were realised in three facets of mindfulness, namely *Observe* ($F(1,10)=18.81$, $p=0.00$), *Nonreact* ($F(1,10)=9.05$, $p=0.01$), and *Act with Awareness* ($F(1,10)=5.13$, $p=0.05$). These data suggest that the mindfulness intervention contributed to the increase in mindfulness within these facets. Furthermore, the *Full Scale* ($F(1,10)=13.31$, $p=0.004$) suggests that there was an overall significant increase in mindfulness. A post-intervention focus group discussion yielded vital insight into how the mindfulness skills provided this group of teachers with a form of support that they could draw on in their teaching practice.

Based on this study's findings, it may be beneficial for schools to consider utilizing the services of a trained mindfulness facilitator to explore possible benefits that it may have in supporting teachers in their professional capacity. Additional studies of this nature, including a variety of different schools based in South Africa, would make the research findings more generalisable in the South African context, strengthening research outcomes.

Key words: compassion, mindfulness, mindfulness-based intervention, South Africa support, teachers.

OPSOMMING

Daar is 'n internasionale toename in die praktyk van bewustheid as 'n hulpmiddel vir professionele persone om stres meer effektief te bestuur en hul prestasie te optimaliseer. In veral Suid-Afrikaanse skoolinstellings is die nut van bewustheid 'n onder-nagevorste onderwerp. Hierdie navorsing was daarop gemik om die gaping te vul deur 'n eksplorering van die effek van 'n Bewustheidsgebaseerde Intervensie met 'n groep onderwysers. Die studie het (Bothma, 1997) (Baer, et al., 2008) (Luck, Jackson, & Usher, 2006) van 'n verkennende gemengde-metodes navorsingsontwerp gebruik gemaak. 'n Steekproef van elf onderwysers het oor 'n tydperk van nege weke aan 'n bewustheidsprogram deelgeneem. 'n Voor-toets- en na-toetsvraelys, asook 'n fokusgroep, het kwantitatiewe en kwalitatiewe data van die deelnemers ingesamel voor en na die program uitgevoer is, om vas te stel of die intervensie 'n statisties beduidende uitwerking op die onderwysers se vlakke van bewustheid en medelye na studente gehad het; sowel as om 'n dieper begrip te ontwikkel van die proses van die verwerwing van bewustheidsvaardighede in die onderwysers.

Die vlakke van medelye teenoor studente het redelik konsekwent gebly, met geen beduidende veranderinge gerapporteer nie. Daar is egter beduidende resultate behaal in drie fasette van bewustheid, naamlik Observe ($F(1,10) = 18,81, p = 0,00$), Nonreact ($F(1,10) = 9,05, p = 0,01$) en Act with Awareness ($F(1,10) = 5,13, p = 0,05$). Hierdie data dui daarop dat die bewustheid intervensie bygedra het tot die toename in bewustheid binne hierdie fasette. Verder dui die volle skaal ($F(1,10) = 13,31, p = 0,004$) aan dat daar 'n algehele beduidende toename in bewustheid was. 'n Na-intervensie fokusgroepbespreking het 'n belangrike insig gegee in hoe die bewustheidsvaardighede hierdie groep onderwysers 'n vorm van ondersteuning bied wat hulle in hul onderwyspraktyk kan vestig.

Op grond van hierdie studie se bevindinge, kan dit voordelig wees vir skole om te oorweeg om die dienste van 'n opgeleide bewustheid-fasiliteerder te gebruik om moontlike voordele te ondersoek wat dit mag hê om opvoeders in hul professionele hoedanigheid te ondersteun. Bykomende studies van hierdie aard, insluitend van 'n verskeidenheid verskillende skole wat in Suid-Afrika gebaseer is, sal die navorsingsbevindings meer algemeen maak in die Suid-Afrikaanse konteks, en daarmee die navorsingsuitkomst bevorder.

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CHAPTER 1

DESCRIPTION OF THE RESEARCH

1.1 INTRODUCTION

Mindfulness has in recent decades begun to command the attention of researchers and practitioners in disciplinary domains, such as Integrative Medicine, Psychology, and, more recently, Education and Management Studies. As a consequence of these developments, in particular across Europe and North America, in the United Kingdom, China, New Zealand, and Australia, mindfulness has been tested and used in educational contexts and mindfulness practices have become pivotal life skills that many educational institutions and organisations now promote and adopt (Schonert-Reichl, Oberle, Lawlor, Abbott, Thomson, Oberlander & Diamond, 2015; Shapiro, Lyons, Miller, Butler, Vieten & Zelazo, 2015; Waters, Barsky, Ridd & Allen, 2015; Ager, Bucu, Albrecht & Cohen, 2014; Weare, 2014; Kearney, Kelsey & Herrington, 2013; Burke & Hawkins, 2012; Roeser, Skinner, Beers & Jennings, 2012; Sherretz, 2011; Holland, 2004). In particular, mindfulness practices have entered educational contexts either as part of whole school development with teachers, parents, and students; or with specific target groups at risk of stress and strain.

Mindfulness is also now a well-established domain of professional development. There are several online and practical mindfulness courses and organisations that serve as support resources for teachers, parents and students. Referring mostly to the North American context, Meiklejohn (2012, p. 2) provides some examples: Inner Resilience Program (<http://www.innerresilience-tidescenter.org>); South Burlington, VT Wellness and Resilience Program (<http://sbsd.schoolfusion.us/modules/cms/pages.phtml?pageid=195404&SID>); Mindful Schools (www.mindfulschools.org) based in Oakland, CA; Learning to Breathe (USA) (www.learning2breathe.org); Mindfulness in Schools Project (U.K.) (www.mindfulnessinschools.org); Still Quiet Place (USA) (www.stillquietplace.com); Stressed Teens (USA) (www.stressedteens.com); and Wellness Works in Schools (USA) (www.wellnessworksinschools.com). More specifically,

Meiklejohn also notes three teacher training initiatives: Mindfulness-Based Wellness Education (MBWE) at the Ontario Institute of Studies in Education of the University of Toronto; Cultivating Awareness and Resilience in Education (CARE) (www.garrisoninstitute.org); and Stress Management and Relaxation Techniques (SMART) in Education (<http://smart-in-education.org/>). Many more such organisations and courses exist in other country and regional contexts.

There is, as shown, a strong international movement in Mindfulness-based Interventions (MBI) in education. In Africa, and specifically in South Africa's education system, the adoption of mindfulness has been relatively slow, although some progress has been made in recent years. Stellenbosch University, for example, working in collaboration with the Institute for Mindfulness of South Africa, has devised a two-year training programme in mindfulness. The programme trains professionals in clinical, counseling, coaching, community and educational settings who would like to offer mindfulness based intervention practices. The first cohort of trained practitioners from this programme received their certification at the end of 2015. As a consequence of these and other interventions, there is an emerging community of mindfulness practitioners in the Western Cape that are beginning to deploy their skills across a range of professional contexts. However, while MBI have gained prominence in developed countries, there is a research gap in South Africa pertaining to the use of MBI in educational as well as other professional settings.

This research project represents a modest effort toward addressing that gap. The logic of the argument that I wish to put forward is as follows: MBIs have been tested in a number of countries as a means to promoting teacher well-being. However, there is as yet no research evidence that explores the effectiveness of MBIs within educational environments in South Africa. This research therefore explores mindfulness-based practices as a tool to support teachers: first, to promote teacher mindfulness as a means to enhance well-being, and second, to facilitate the shift towards non-judgmental and compassionate attitudes towards all learners.

1.2 PROBLEM STATEMENT

Teachers all over the world are faced with multiple stressors on a daily basis. More specifically South African school teachers experience unique and particular challenges that arise from the school and policy environments in which they work (Schulze & Steyn, 2007). These challenges include the effects of numerous curriculum changes over the past two decades, as well as promoting and embracing

inclusive education (Department of Education, 2001). Common stressors for teachers arise from the demands of school administration, classroom management, and the range of behavioural issues they are faced with on a daily basis (Peltzer et al, 2009; Olivier & Venter, 2003; Ngidi & Sibaya, 2002). The responsibility placed on teachers to ensure all learners are included in the learning process, and that individual barriers to learning are addressed, create an additional set of expectations on teacher performance (Myburgh & Poggenpoel, 2002).

As a teacher, I have been exposed to the stresses and strains of the education environment and, through my experience, have realised the need for teacher support mechanisms for managing these demands. Through the experience of attending several mindfulness courses while practising as a teacher, I found that my overall classroom demeanour and teaching practices were positively enhanced through the exercise of mindfulness. Out of this, I developed a basic theory of change: that there would be value in allowing other teachers the opportunity to engage in mindfulness techniques as a way of exploring how mindfulness may better support teachers.

The impetus for this study is drawn from two recurring issues highlighted in existing research. In brief, first, teachers in South Africa experience high levels of stress and strain. Second, teachers struggle to promote and advance inclusive education practices in the schools in which they work (Black-Hawkins, 2012; Hay, 2003; Hay, Smit, & Paulsen, 2001). These issues are explained in more detail with reference to the literature.

1.2.1 Teacher stress in South Africa

This study draws from research evidence that has highlighted the stressors that teachers in South Africa routinely experience. In this context Olivier and Venter (2003, p. 187) have defined teacher stress as “a psychological concept with negative connotations, which refers to a response to, or results from, the inability to cope with physical and/or mental demands, real or perceived, made on teachers as a result of their profession”. Stressors can originate from external triggers (such as workload or student behaviour) or internal triggers (such as an inherent competitive or ambitious personality). When teachers assess a situation as stressful, and are required to channel their emotional and cognitive resources towards protecting and managing themselves in the situation, these emotional and cognitive resources are no longer, or to a much lesser extent, available for the intended use of developing classroom relationships and engaging in meaningful pedagogic practices. Roeser et

al (2013) suggest that “in the context of the inherently stressful features of the job of teaching [...] teachers need assistance in developing their self-regulatory resources (e.g., higher order skills and mind-sets) for coping and being resilient” (p. 789).

Teaching in South Africa is considered a highly stressful profession (Schulze & Steyn, 2007). Peltzer et al (2009), for instance, have reported on the considerably high stress levels among South African teachers. Stressors identified in their study include time pressures, educational changes, administrative problems, educational system, professional distress, and pupil misbehaviour. Furthermore, health issues such as hypertension, stomach ulcers, diabetes and major mental distress are noted as particular psychosomatic and psychological health issues pertaining to teacher stress. In an earlier study, Olivier and Venter (2003) explore the stress that teachers experience due to their employment. They claim that this stress appears to primarily affect them on the emotional, cardiovascular, fatigue and behavioural levels. They argue that it is imperative that both the Department of Education and school principals are increasingly made aware of the emotional and physical stress and strain that teachers experience, that more should be done to implement stress preventative measures and promote coping strategies, and that individual teachers need to pay special attention to their health and wellbeing, and prioritise stress management techniques.

1.2.2 Inclusive education in South Africa

Inclusive education was formally introduced in South Africa through the *Education White Paper 6: Special Needs Education, Building an Inclusive Education and Training System* (Department of Education, 2001). The White Paper defines inclusive education in terms of a list of eight key points (p. 16, Section 1.4). For the purpose of this study I would like to highlight two pertinent ideas from Education White Paper 6, the idea that inclusive education involves an acknowledgement of and respect for difference in learners and, second, the idea that inclusive education implies changing existing attitudes. What the Department of Education (DoE) (2001, p.18) recognises is that part of the first steps toward promoting inclusive education is to address “negative attitudes to stereotyping of differences”. This is a major hindrance for a country attempting to reorient its educational practices towards inclusivity (Bothma, 1997). In this context the research described in this research project aims to promote MBI as one of the potential tools to help facilitate the shift towards non-judgmental and compassionate attitudes towards all learners.

The DoE (2001, p. 21) also states that: “The most important way of addressing barriers arising from the curriculum is to make sure that the process of learning and teaching is flexible enough to accommodate different learning needs and styles”. It follows that in order for teachers to be flexible and to accommodate learners, teachers must be aware of both learners’ needs as well as of their own influence and position in the learning experience. Without this awareness teachers undoubtedly struggle to be able to provide the necessary input to enhance learning. Hence, as a starting point, I want to propose through this research project that teachers need to be particularly encouraged to be attentive, sensitive and aware at all times in order to respond appropriately to the needs of their learners.

Of course the encouragement of inclusive education or its desired impact cannot happen overnight. Research indicates that teachers in South Africa need to be guided through a process(es) of training or upskilling in order to understand, explore and to assimilate new ways of perceiving and practicing, particularly with regards to inclusive education (Engelbrecht, Oswald, & Forlin, 2006; Naicker, 2006; Hay, Smit & Paulsen, 2001; Prinsloo, 2001). While teachers are required to change, it has also been noted that teachers believe they do not have the necessary skills to teach inclusively and that they need to be taught inclusive education skills (Hay, Smit & Paulsen, 2001). Hence, there is a plea for assistance.

Waldon (2011) explains that one becomes inclusive by demonstrating inclusive behaviour, developing good and sustainable inclusive cultures and practices”. Yet, teachers and schools struggle to know *how* to simply be inclusive, particularly principals and teachers who subscribe to a within-child¹ approach associated with the medical deficit model. Current research suggests that attitudes, values and beliefs are paramount in making the shift to inclusive teaching practices and in addressing the challenges that teachers face in the classroom (Donohue & Bornman, 2014; Avramidis & Norwich, 2002). Furthermore, it has been argued that teachers need to be present in order to address the needs that arise in a classroom context (Rodgers and Raider-Roth, 2006).

As linked to the problem statement, it is important to point out that teacher presence is particularly challenged when teachers are faced with factors that compete with or confound the ability to remain

¹ The within-child approach is based on a medical deficit model that assumes the presenting problem remains within the person alone, negating possible systemic risk factors or contextual barriers (Swart & Pettipher, 2011).

present, especially if they are personally under resourced in being able to cope and manage these stressors.

This study therefore explores the effect that intervention may have in promoting mindfulness and compassion towards students.

1.3 RESEARCH QUESTION AND OBJECTIVES

The primary research question that guided this research was: What role does a Mindfulness-based Intervention (MBI) play in supporting teachers' classroom practices? Through the application of secondary questions this research specifically investigated the following two sub-questions:

First, how effective is the programme at changing self-reported, quantitative levels of mindfulness and compassion in the classroom? Quantitatively this was formulated through the hypothesis that the intervention would significantly impact levels of mindfulness, with the null hypothesis being that the intervention would not significantly impact mindfulness. A separate hypothesis stated that the intervention would significantly impact compassion towards students, and the null hypothesis stating that the intervention would not significantly impact compassion towards students.

Second, what were the participants' subjective experiences of the MBI programme? There is an absence of research evidence pertaining to MBI with teachers in the South African context. As such, this research aimed to present a MBI intervention programme with a group of school teachers in a school based in Cape Town in the Western Cape of South Africa. Using an exploratory, mixed methodological approach, this research project deployed a trained and certified mindfulness practitioner to apply the MBI in the school context. The **objectives** of this research were thus to:

- Determine whether the intervention will have a statistically significant impact on levels of teacher mindfulness and teacher compassion toward learners.
- Capture how the participants experienced the MBI programme.
- Explore if and how the practice of mindfulness might be able to support teachers in their professional capacity.
- Modestly contribute to the knowledge base of mindfulness and education in South Africa and to serve as a preliminarily study that can be developed further.

1.4 THEORETICAL AND CONCEPTUAL FRAMEWORK

Given the problem statement above, the teacher-presence theory developed by Rodgers and Raider-Roth (2006) underscores the importance of a state of present-mindedness specifically for teachers. Their theory is applicable in promoting inclusivity and compassion in classroom contexts; moreover, it is aligned to the theoretical framework adopted for this study, which is set out below. In particular, Rodgers and Raider-Roth (2006) suggest that presence is defined:

as a state of alert awareness, receptivity, and connectedness to the mental emotional, and physical workings of both the individual and the group in the context of the learning environments, and the ability to respond with considered and compassionate best next step (p. 265).

Their theory of presence advocates for authentic teacher-student relationships: “where teachers know and respond with intelligence and compassion to students and their learning” (p 266). This authenticity, they suggest, stems from a reflective practice of self-knowledge, trust, and compassion. It is through presence and authentic relationships that teachers are called to respond with intelligence and compassion. Furthermore, they explain that teaching involves *connecting* with students, and engaging in learning processes. The connection teachers develop with themselves and their students is enhanced when teachers slow down to observe themselves, their students and others; as well as when they develop open communication with students, colleagues, parents and community members. Drawing on this basic theoretical explanation for the importance of teacher presence, the theoretical framework underpinning this research is expanded and elaborated using John Kabat-Zinn’s² (2013) theory of wholeness and interconnectedness, which forms a basis for his conceptualisation of mindfulness.

While the discussion that follows is conceptual in its orientation, it is also underpinned by a strong socio-ecological systems perspective. The broad orientation of a socio-ecological systems theory recognises that parts of a system need to be understood in relation to their whole (Bronfenbrenner, 2005; Ostrom, 2009). Hence, in order to fully comprehend the complexities of an individual, or an individual system, the broader socio-ecological systems that hold and interact with the person or micro-system need to be accounted for and their inter-relational influences acknowledged.

² Kabat-Zinn is Professor of Medicine Emeritus at the University of Massachusetts Medical School, Worcester, Massachusetts, US, where he was the founding director of the Centre for Mindfulness in Medicine, Health Care, and Society. He is also the director of the Centre’s world renowned Stress Reduction Clinic (Gazella, 2005).

1.4.1 Wholeness and interconnectedness

In *Full Catastrophe Living*, Kabat-Zinn (2013, p. 172) starts from the premise that “the body and mind are not two separate domains – they are intimately interconnected and completely integrated”. This view is fundamental to the paradigm shift towards integrative and participatory medicine that not only believes in the unity of mind and body, but that people ought to be encouraged to be active participants in their own health and well-being (Kabat-Zinn, 2013). From this understanding, it is restrictive to solely analyse parts and components of an organism, despite the relevance that a specific domain may hold in addition to its wholeness. Rather, a more comprehensive perspective is to pay attention to the interactions of mind, body, and behaviour and to account for the whole organism.

Kabat-Zinn (2013) explains that there are two primary keys to unpacking the concepts of wholeness and interconnectedness. First, he argues that the whole process of paying attention is governed by how we perceive (or do not perceive) things, and how we think about them and represent them to ourselves. Perception encompasses how we conceptualise our problems and our ability to confront, understand, and cope with them, and possibly “befriend and transcend” the effects of stress and strain in life (p.173). Second, he argues that an integral part of the notions of wholeness and interconnectedness is the interaction between the mind and body, and how this interaction may influence health and well-being. The self, according to Kabat-Zin, is conceptualised as a “wholly integrated thinking, feeling, and socially interacting being” that is in constant relationship to itself and its environment. (p.174)

Biologically, our well-being depends intimately — and entirely — on the integrated functioning of our entire body, from using our five senses, to the muscles, nerves, cells, organs and organ systems. The underlying assumption we might derive from this complex biological system is that the body is a self-organising and self-healing entity, relying on finely tuned feedback loops that interconnect and integrate all aspects of a person (Kabat-Zinn, 2013).

While our biological functioning is regulated by information flow, which connects each part of the system to the other parts that are crucial to their performance, interconnectedness is equally important psychologically and socially. Our senses enable us to connect with both our external reality as well as with our internal states of being. They give us essential information about the environment and about other people, which allows us to organise a coherent impression of the world, to function in

‘psychological space’, to learn, to remember things, to reason, to respond or react with emotion, i.e. “everything that we mean when we use the word *mind*” (p. 179).

Hence, the way in which our body is organised allows for a psychological order that emerges from the physical order but also contains it. Kabat-Zinn (2013, p.179) writes: “At each level of our being there is a wholeness that is itself embedded in a larger wholeness. And that wholeness is always embodied”. Furthermore, it could be argued that the notion of psychological interconnectedness extends beyond ourselves to the social systems and spaces we form a part of, acknowledging that while we are individually whole we are also part of a larger whole. For example we are interconnected through family, friends, acquaintances, and then to the larger society and ultimately to the entirety of humanity and life on earth.

This theory is highly relevant to the notion of mindfulness in that mindfulness is a practice that promotes the perception of interconnectedness and wholeness. It is through mindfulness, Kabat-Zinn theorises, that we are able to recognise how the mind may automatically react habitually or out of a lack of awareness, how one’s views and behaviours may be shaped by prejudices, beliefs, preferences, and avoidances that have been developed over time through experiences.

If we hope to see things more clearly, as they actually are, and thereby perceive their intrinsic wholeness and interconnectedness, we have to be mindful of the ruts our thinking gets into and the tacit assumptions we make all the time about things and people. We have to learn to see and approach things somewhat differently. (Kabat-Zinn, 2013, p. 181)

Kabat-Zinn (2013) claims that unless we are consciously practicing mindfulness we might only rarely observe our inner dialogue or consider the validity of the thoughts and beliefs we hold about ourselves. The implication of this is that if people are not aware of the limitations that some thoughts and beliefs may impose over their being, learning, personal growth, the ability to make positive changes is hindered and compromised.

Wholeness and interconnectedness is ultimately what contains the human being, and in this way is fundamental to our nature. No matter what past experiences may have occurred, or the degree of suffering that may be experienced now, there is always the presence of original wholeness (Kabat-Zinn, 2013). However, for most people, connecting to this wholeness does not happen easily, and it requires a certain kind of work. The work of a mindfulness programme, then, is to allow people to see, feel, and believe in their wholeness again; to break out of conscious misconceptions, and to rather

cultivate compassion and an appreciation for all life, as part of the infinitely interconnectedness of the natural world.

A mindfulness programme is typically comprised of various practices, such as breath awareness, body scan, paying attention to basics such as eating, walking, moving, and stretching. These practices offer participants an opportunity to catch glimpses of and engage in with one's own wholeness. Through repeated practice is the possibility of living in a more integrated way, day-to-day, and moment-to-moment, in touch with one's own wholeness and aware of the interconnectedness with others, and the world around us. Mindfulness is also a channel to experience wholeness. As Kabat-Zinn (p.187) explains:

Feeling whole, even for brief moments, nourishes us on a deep level. Whole implies integration, an interconnectedness of all parts of a system or organism, a completeness. The nature of whole is that it is always present.

1.4.2 Regulation and connectedness

Kabat-Zinn (2013) draws on a model of connectedness to illustrate the importance of regulation in promoting both connectedness and interconnectedness. Regulation is explained by Kabat-Zinn (2013, p.280) as “the flow of energy in and out of the system and the use of that energy to maintain the living systems organisation and integrity in a complex and ever-changing dynamic state as it interacts with the environment”. Connectedness refers to our need for relationship and the meaning and the purpose we can derive from being in relation to another, whereas interconnectedness refers to the “intrinsic reciprocity” of relationships (Kabat-Zinn, 2013, p.271)

Regulatory processes are linked to the functioning of feedback loops, which as previously explained, receive and deliver relevant information to maintain balance and the functionality of systems. From this understanding of regulation the notion of *self-regulation* emerges. This is defined as “the process whereby a system maintains stability of functioning and, at the same time, adaptability to new circumstances” (Kabat-Zinn, 2013, p.280). Therefore, self-regulation is connected to how a person chooses to manage their energy and respond in different situations, and is reliant on the ability to pay attention to the relevant feedback received by that person. Furthermore, self-regulation plays a pivotal role in how the individual parts of the system communicate and interact with each other, to maintain an overall balance of energy and information flow with the system as a whole. When imbalance occurs

there can be state of dysregulation, which is a consequence of a disrupted or disconnected feedback loop in a system, generally creating disorder to the broader system.

Kabat-Zinn explains that a major cause of dysregulation is disattention, which is ignoring or not attending to the relevant feedback information in our mental and physical systems, which is necessary for the enhancement and functionality of the being. Hence, attention is vital in maintaining and promoting regulation. When attention is given, connection is created, which allows energy to flow and regulation to function optimally.

When the whole system functions together, in a relatively healthy state, it generally is capable of 'taking care of itself', with not too much additional attention being given to it. However, a system out of balance requires attention and care to re-establish connectedness. Giving attention to the body and mind is not always as easy as it may sound. This is where mindfulness arises as a mechanism to promote wholeness and connection.

1.5 RESEARCH PARADIGM

The research reported in this project is framed within a pragmatic paradigm, allowing for pluralism in the choice of methods (quantitative and qualitative) and encouraging conscious awareness of the choices being made by the researcher that gave shape to the research outputs (Morgan, 2014; Wildemuth, 1993). Pragmatism as a paradigm can be distinguished from purely positivist or constructivist paradigms — to the extent that the former relies on deductive reasoning, objectivity and generality, and the latter on inductive reasoning, subjectivity and context — by its emphasis on abductive reasoning (continuous switching between deductive and inductive reasoning), intersubjectivity (that meaning is created through interaction and exchange), and transferability (the ability of knowledge produced in one setting to be applied in other) (Morgan, 2007). The research paradigm will be discussed in detail in Chapter 3.

1.6 RESEARCH DESIGN AND METHODOLOGY

An exploratory mixed methods research design guided this study which developed a pragmatic approach. In this design, the collection and analysis of both qualitative and quantitative data sets

drawn from the teachers participating in the MBI programme were undertaken. The quantitative component of the research was based on a One-Group Pretest-Posttest experimental design (Neuman, 2007). Participants completed self-reported feedback questionnaires at two time points, one before the intervention, and the other after the intervention.

There was no control group in this research study. The reasons for this were twofold. The first reason not to employ a control group was based on an ethical principle of all participants having fair and equal access to the benefits of the study (Horn, Graham, Prozesky, & Theron, 2015). Time and cost constraints did not allow the trained mindfulness facilitator the capacity to provide a potential control group with the same mindfulness programme after the study. The second reason for not having a control group was that the study includes a qualitative component as part of the post intervention. I led a participant focus group with the aim to receive qualitative experiential feedback from participants to triangulate the results (Crano & Brewer, 2008). This focus group also allowed me to gain insight into potential external influences that may have had an affect the results.

1.6.1 Participant selection

The selection of participants was based on a non-probability purposive sampling approach. Non-probability purposive sampling was used because the study focused on a small sample size ($n=11$), which the researcher has chosen specifically to assist with clarifying and deepening her understanding of the phenomenon of mindfulness as this was applied with the teachers (Neuman, 2007). In addition, the researcher's constraints, both time and financial, did not allow for other forms of probability sampling, such as random sampling.

In terms of the identification and selection of participants, public and private mainstream primary and high schools were sent an advertisement by email, which served as the opportunity for principals to invite teachers from the relevant school to participate in the MBI programme (Appendix A). This advertisement was sent to approximately twenty schools. These schools were based in the Cape Town City Bowl, Southern Suburbs areas, and the Atlantic Seaboard area of Cape Town. Teachers were given one month to reply and apply.

The researcher aimed to create a group of twelve participants from one school to voluntarily sign up for the programme. In this regard, the aim was to select participants from the same or similar teaching

environment to contain the teaching experiences that each member brought to the group. Furthermore, with permission from the school principal, the programme aimed to be offered on the school premises, to ensure convenience for participants.

Specific selection criteria for participation were: that the person had a formal teaching or counseling qualification; that he/she was currently engaged in a full-time position at the relevant school; and, that he/she was available to attend at least seven of the eight sessions. The sample of volunteers was purposive in that volunteers needed to fulfill the stipulated requirements. The school with the first twelve participants to apply was selected. While the research was aligned to that of a case study, because of the choice of a single school, this research did not focus on the specific school context or dynamics. Rather each participant's experience was treated independently.

1.6.2 Data collection

1.6.2.1 Questionnaires

Participants were asked to complete questionnaires relating to both mindfulness and compassion towards learners. These questionnaires aimed to capture quantitative data. The Five Facet Mindfulness Questionnaire (Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006) with 39 items, measures situational elements of mindfulness on a 1-5 Likert scale (Appendix B). The second questionnaire, The Compassion Towards Students was based on Pommier's (2010) Compassion For Others questionnaire, with 24 items measured on a 1-5 Likert scale (Appendix C). These items explored the level of compassion teachers felt towards students. Both the Five Facet Mindfulness Questionnaire and the Compassion For Others Questionnaire are in the public domain and permission was not required for use thereof in this research project. These questionnaires were administered before (pretest) and after (posttest) the intervention.

1.6.2.2 The 8-week MBI Programme intervention

After the pretest questionnaire was administered, the intervention commenced. It was conducted over a nine-week period, which included eight sessions organised by a trained facilitator with relatively little-to-no involvement by the researcher during this phase.

1.6.2.3 Focus group discussion

While this research aimed to measure whether or not the effect of the intervention was statistically significant or not, it also aimed to understand the *lived experiences* of the teachers who participated in the mindfulness course (Merriam, 1998). A post-intervention focus group collected qualitative data by inviting the twelve participants to provide personal feedback of their experiences of the MBI programme (Babbie & Mouton, 2006). The focus group also aimed to gain insight into the quantitative data results, and allow teachers the opportunity to discuss and share relevant experiences pertaining to the *outcome* of the intervention. The researcher facilitated a discussion with the participants and provided some structure to the conversation using a set of prepared open-ended questions (Appendix D). This conversation was audio recorded, with the permission of the participants.

1.6.3 Data analysis

The resulting pre- and post-datasets for The Five Facet Mindfulness Questionnaire and the Compassion Towards Students Scale was statistically analysed³. A mixed model repeated measures ANOVA was used to test for possible differences in pre- and post-mean scores (Rosenthal & Rosnow, 2008). A mixed model contains both fixed effect and random effect. Time (pre and post) was treated as fixed effect and the participants as random effect.

The qualitative data collected from the focus group discussion was transcribed and coded using a descriptive approach, which is further elaborated on in Chapter 3 (Saldana, 2009). Various categories and themes were extrapolated from the codes for documentation and analysis.

1.7 VALIDITY AND RELIABILITY

The absence of a control group in this study represented a high risk to the internal validity of the findings. This risk was mitigated, in part, by the use of a post-experimental focus group discussion. Another relevant threat to the internal validity of the findings was pre-test sensitisation. This was partially mitigated by the timing between the pre-test and post-test questionnaires, which was 13

³ The support of Prof. Kidd is acknowledged.

weeks. Even though significant events may have occurred in the lives of the participants during the course of the study that may have influenced the findings, the focus group provided participants with the opportunity to discuss the impact of these events in relation to the effects of the intervention. Dropouts of participants during the intervention represented a threat to validity. While the facilitator's ideal group size was 12 participants, 11 participants were recruited for the study to allow for a 10% oversampling (Babbie & Mouton, 2006).

There is the possibility that participants did not provide honest and reliable feedback in how they answered the questionnaires, as well as in the focus group discussion (Foxcroft & Roodt, 2013). Such errors may have arisen in the form of participants not answering questions, or answering from a biased standpoint — for example, providing answers that they deemed socially desirable, or a tendency to answer neutrally instead of taking a particular stand. Furthermore, despite the participants voluntarily taking part in the programme, there was the chance that participants may falsify their answers purposefully or even unconsciously misrepresent their true thoughts and feelings about their experience. With a strong emphasis on respect and honesty throughout the programme, it was the researcher's hope that this would resonate with respondents and that they would approach the questionnaires with the intention to complete them honestly and completely. The possibility of error also lay in how the questionnaires were administered and scored. Questionnaire results were checked and validated by the researcher, the facilitator, the supervisor and a statistician. Where applicable, Cronbach's alpha is reported as a measure of inter-item reliability (Nunez, 2006). Furthermore, having both qualitative (focus group transcript) and quantitative (questionnaires) data sets provided an opportunity for the researcher to triangulate the results, and explore not only the credibility in common themes within the focus group feedback, but also the potential convergence of quantitative results with qualitative feedback.

1.8 ETHICAL CONSIDERATIONS

This research called for qualified, full-time public or private mainstream primary or high school teachers to voluntarily choose to take part in the research programme. While it was open to all public or private mainstream primary or high school teachers, due to time constraints, and the restricted advertising channel of only twenty schools being contacted, the first eleven teachers from the same school that signed up for the programme were considered. The advertisement can be viewed in

Appendix A. The participants formed part of a purposive sample group who had an interest in pursuing a mindfulness programme.

Prior to the commencement of the MBI course, the facilitator was briefed by the researcher and asked to sign a Facilitator's Agreement (Appendix E), which outlined ethical practices to be observed during the research. The following issues were discussed with the facilitator:

- To respect the autonomy of all participants by recognising his/her freedom to withdraw from the programme at any stage.
- To maintain confidentiality and to respect the privacy of all participants. For example, the name of the school and the participant names were not to be mentioned to others.
- To work in collaboration with the researcher specifically with regards to the effective management of course logistics and participation, such as planning for dates and times of sessions, and to ensure punctual attendance at all agreed sessions.
- To provide the best possible service to participants, in line with your qualification, with the aim of increasing their knowledge and awareness of mindfulness practices as these relate to professional employment as teachers.
- To avoid harm to participants at all stages of the programme.
- To keep a referral list available at each session of psycho-social support providers, and to be able to provide the relevant details to a participant should she/he require further support from a provider.

Afterward the facilitator was briefed, the participants were briefed, and each received a Participant Informed Consent form (Appendix F), outlining the requirements of participation, what the study entailed, costs of participation such as time commitments, and the benefits that may arise such as increased self-awareness and stress management techniques. The form highlighted to participants that while their intention ought to be to complete the eight weeks of the study, since informed consent is regarded as a process, they had the right to withdraw from the study at any point (Horn et al, 2015). The Participant Informed Consent form was presented verbally and distributed in written format, and participants had the opportunity to ask questions. When, and if, the participant was comfortable with the programme process and fully understood his/her role, each participant was asked to sign the form. This reinforced the ethical principle of autonomy, which ensures participants have the freedom to make their own choices (Allan, 2011).

Participants also received a Participant Information Sheet (Appendix G), which they were able to take home with them. The information sheet contained exactly the same information as the consent form; however, it also included a list of both public and private mental health care service providers. Information about these service providers was made available to participants should the need have arisen for additional support.

Participant and school names remained anonymous. Participants were coded numerically and there was no need to mention a school in any written documentation reporting on the study, such as this research project. This anonymity coincides with the principle of confidentiality (Allan, 2011). The personal reflections and experiences that arose from discussion in group forums, during the eight sessions, remain confidential and are not reflected in the research; only the data recorded from the focus group discussion was used for qualitative purposes to reflect on the overall programme experience. All questionnaires and focus group feedback documentation have been securely stored and will remain stored for a period of five years. Only the researcher and supervisor will have access to the data. Raw data collected is stored in a safe. Any data loaded electronically onto a computer is protected through the use of a security code. It is the responsibility of the researcher to control data access.

This programme posed minimal risk to participants. The facilitator who conducted the intervention is a trained mindfulness practitioner. In 2015, she received certification through the Institute for Mindfulness South Africa, in collaboration with Stellenbosch University Faculty of Medicine and Health Sciences. Participants were not required to physically perform any actions they were uncomfortable with. They were required to be guided through the programme with the expertise of the trained mindfulness facilitator. This research was approved by an independent ethics committee from Stellenbosch University. This ensured that ethical principles were adhered to and research practices were aligned to human research ethical procedures.

1.9 CLARIFICATION OF CONCEPTS

This research study rests on the concepts of mindfulness and compassion. While this chapter briefly clarifies the meaning of the terms used, Chapter 2 further unpacks these definitions and explains how the concepts are measured.

1.9.1 Mindfulness

Kabat-Zinn (2003, p. 145) defines mindfulness as “the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment”. Linking this definition to the concepts of wholeness, (inter)connectedness and regulation explained above, mindfulness is an intentional cultivation of attention, sustained in a disciplined manner over time. While there is no standardised construct on which to base a measurement of mindfulness, there are various instruments that have been devised to attempt to quantify the experience of a mindfulness intervention (MI). This research study utilises the Five Facet Mindfulness Questionnaire (FFMQ), which are 1) observing, 2) describing, 3) acting with awareness, 4) accepting without judgment, and 5) non-reacting stance toward internal experiences.

1.9.2 Compassion

This research incorporates the concept of compassion as forming part of the mindfulness process. Compassion involves an emotional sensitivity and awareness of suffering, and a deep desire to relieve the suffering either experienced by oneself (self-compassion) or others (compassion towards others) (Neff & Dahm, 2014). The compassion scale used in this study is based on Neff (2003) and Pommier’s (2010) conceptualisation of compassion. This research study employs Pommier’s (2010) scale that measures *compassion towards others*, and is based on six subscales. These subscales are: kindness, common humanity, mindfulness, indifference, separation, and disengagement.

1.10 CHAPTER DIVISIONS

This research study is being conducted for the purposes of a M.Ed mini-dissertation. The research process and results will be reported in five chapters:

- Chapter 1: The research study is introduced and a brief overview of the project is outlined.
- Chapter 2: A review of existing literature relevant to the research questions is presented and discussed. The study is positioned in relation to a gap in the literature.
- Chapter 3: The research design and methodology are mapped out.
- Chapter 4: Research findings are reported and results discussed and analysed.

- Chapter 5: The project's limitations and recommendations are reviewed. Concluding remarks to finalise the research study are given.

1.11 CONCLUSION

The practice of mindfulness is proliferating in professional settings all over the world. Mindfulness is increasingly widely believed to assist professionals to become more effective at managing stress and strain and optimise their performance. In South African school settings in particular, the utility of mindfulness is an under-researched topic. This research aims to begin to fill that gap by developing an exploratory mixed-methods study with a sample of eleven teachers that participated in a mindfulness programme over a nine week period. A pre-test and post-test questionnaire as well as a focus group collected quantitative and qualitative data from the participants before and after the programme was carried out. These research tools were chosen as a way to help the researcher to determine whether the intervention had a statistically significant effect on the teachers' levels of mindfulness and compassion toward students, as well as to develop a deeper understanding from the teachers of the process of acquiring mindfulness skills.

The chapter that follows explores the research literature dealing with the subject of mindfulness, compassion, and the effectiveness of mindfulness interventions in different educational contexts. The review lays the foundation for all subsequent chapters of this study.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

To reiterate the key message from Chapter 1, the purpose of this study is to assess whether a mindfulness intervention performed with teachers in a South African school results in increased levels of mindfulness and compassion. This literature review aims to build a foundation for the argument that this study advances: that mindfulness can be an instrument for teachers to manage their well-being and promote more effective teaching. In reviewing the wide range of related literature, it became apparent that four major areas needed to be reviewed, namely:

- critical review of concepts of mindfulness and compassion, and measurement approaches;
- key mindfulness interventions from which the inspiration for this study is drawn;
- international research literature on mindfulness interventions with teachers;
- South African research literature on mindfulness interventions with teachers.

2.2 REVIEW OF THE CONCEPT OF MINDFULNESS, AND COUNTER-ARGUMENTS

Even though the idea of mindfulness can be traced back some 2,500 years in Buddhist thought, mindfulness has gained particular momentum in academia in the twenty-first century, particularly in disciplines such as education and psychology (Waters, Barsky, Ridd & Allen, 2015; Walach, 2014; Weare, 2014; Zenner, Herrnleben-Kurz & Walach, 2014; Burke and Hawkins, 2012; Davis, 2012; Meiklejohn et al, 2012; Davis & Hayes, 2011; Sherretz, 2011; Siegel, Germer, & Olendzki, 2008; Johanson, 2006).

As noted in Chapter 1, this research study adopts Kabat-Zinn's (2003, p. 145) broad operational definition of mindfulness, which is "the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment". While this definition is widely accepted and used by several leading theorists within the field, some of whom will also be discussed; there are counter-arguments that need to be considered.

This section in particular explores Kabat-Zinn's (2013) conceptualisation of mindfulness and also explores how other theorists have substantiated his understanding in an attempt to further clarify and develop an operational understanding of the concept. Two models are briefly presented, namely the *three-axiom model* (Shapiro, Carlston, Astin, and Freedman, 2006) and the *two-component model metacognitive model* (Bishop et al, 2004). This section then addresses the issue of the measurement of mindfulness, as presented in relation to Baer, Smith, Hopkins, Krietemeyer, and Toney's, (2006) research on the conceptualisation of mindfulness as a multifaceted entity. Finally, a series of objections to the mindfulness discourse are presented and discussed.

2.2.1 A three-axiom model

Shapiro, Carlston, Astin, and Freedman (2006) have unpacked Kabat-Zinn's definition, and propose a model, founded on three axioms, that essentially drive the human system to re-establish connection, regulation and order again, as a way to promote optimal functionality and wellbeing. These three axioms are intention, attention, and attitude, and are explained in relation to the original Kabat-Zinn (2013) definition as:

1. Intention: "on purpose"
2. Attention: "paying attention",
3. Attitude (mindfulness qualities): "in a particular way"

If mindfulness is the conscious attempt to focus attention, then the *intention* to focus attention is a critical antecedent (Kabat-Zinn, 2014; Shapiro, Schwartz & Santerre, 2002). Kabat-Zinn (2013, p. 31) claims that what is necessary in order to engage and deepen the process of practicing mindfulness is a "particular kind of energy or motivation to your practice". Intentions are dynamic in the sense that they can change and evolve. Shapiro et al (2006) propose that intentions can shift along a continuum from self-regulation, to self-exploration, and finally to self-liberation and compassionate service.

Ultimately, intention is the constant backdrop, reminding us, moment to moment, why we are practicing mindfulness in the first place.

Attention refers to observing the operations of moment-to-moment internal and external experience (Shapiro et al, 2006), and is most effective when regulated and sustained. Mindfulness, practiced with attention, allows for the suspension of judgments and observation of changing thoughts, feelings and sensations as they are processed in the experience. By starting to pay attention to thoughts, Kabat-Zinn (2013) argues that individuals might be surprised to find out just how much mental and emotional activity is going on within their subconscious.

The **attitude** with which the practitioner enters into the practice of mindfulness is pivotal to the quality of the attention (Albrecht et al, 2012; Whitesman, 2008; Shapiro et al, 2002). The quality of attention refers to exactly how one attends, and what characteristics are brought to the attention. Intentionally bringing “heart qualities”, such as patience, compassion and non-striving, into the practice of mindfulness, helps to promote acceptance of whatever may arise in the moment (Shapiro et al, 2006, p. 5). Inherent in mindfulness, according to Kabat-Zinn (2013), is the idea of showing respect and attending to each moment, despite whether the moment may present with pain, despair, joy, boredom, or any other state.

While each axiom has been explained individually, in practice they do not occur separately, but are rather required to be present concurrently forming part of a single process. This single process is captured in the essence of mindfulness, that it *is* a moment-to-moment process (Shapiro et al, 2006).

2.2.2 Two-component metacognitive model

Bishop et al (2004) argue further that although conceptual definitions are useful in defining the concept of mindfulness, there remains the need for an operational definition of mindfulness from which valid instruments can be developed to measure the effects of mindfulness interventions. Therefore, based on their understanding of mindfulness as a “state-like phenomenon that is evoked and maintained by regulating attention” (p. 237) they propose a two-component metacognitive model to explain how mindfulness can be developed behaviourally, experientially, and psychologically. The first component is the *self-regulation of attention*; the second component requires the adoption of a particular *orientation towards experiences* in the present moment. Their research together with research findings

such as Brown and Ryan (2004) provide explanations for how mindfulness can be not only a state or trait like state of being, but also a rather a skill (or set of skills) that can be learned (Bishop et al, 2004; Brown & Ryan, 2004; Baer et al, 2006).

2.3 MEASURING MINDFULNESS: A MULTIFACETED CONCEPTUALISATION

Drawing on the various non-standardised conceptualisations and operational definitions of mindfulness, Baer et al (2006) conducted research on the topic and propose a multifaceted conceptualisation of mindfulness. Their research investigated the psychometric characteristics of recently developed mindfulness questionnaires, and subsequently used these instruments to explore the facet structure of mindfulness. Their study first compared five pre-existing mindfulness questionnaires: 1) Mindfulness Attention Awareness Scale (MAAS), 2) Freiburg Mindfulness Inventory (FMI), 3) Kentucky Inventory of Mindfulness Skills (KIMS), 4) Cognitive and Affective Mindfulness Scale (CAMS), and 5) Mindfulness Questionnaire (MQ). From this examination, the authors suggest that all five mindfulness questionnaires demonstrated good internal consistency, and to a large extent correlated with each other.

The second part of their study assessed whether the questionnaires measured different elements or facets of mindfulness. They combined the data sets to derive a 112-item scale. The results from an exploratory factor analysis indicated that five facets of mindfulness were heavily loaded; four from the KIMS were identified as well as one facet from the FMI and MQ. Hence, a five facet construct was derived to include facets of 1) observing, 2) describing, 3) acting with awareness, 4) accepting without judgment, and 5) non-reacting stance toward internal experiences. All five facets on the scales showed adequate to good internal consistency. In conclusion, The Five-Facet Mindfulness Questionnaire (FFMQ) was derived based on statistical results that have demonstrated reliability and validity (Baer et al, 2006). Bergomi et al (2012, p. 14) state: "The FFMQ is a comprehensive scale that integrates the conceptualisations of mindfulness underlying five validated mindfulness scales and measures clearly distinct facets". Consequently, given the research findings to date, the FFMQ questionnaire has been widely utilised in the research space of mindfulness, and has been selected as the measure of mindfulness for this research study.

According to the literature reviewed for this study, it was noted that seven studies (see Appendix H) in the field of mindfulness and educator wellbeing have used the FFMQ. These studies include:

Schussler, Jennings, Sharp & Frank (2016), Frank, Reibel, Broderick, Cantrell & Metz (2015), Beshai, McAlphine, Weare, & Kuyken (2015), Flook, Goldberg, Pinger, Bonus and Davidson (2013), Jennings, Frank, Snowberg, Coccia, and Greenberg (2013), Roeser, Schonert-Reichl, Jha, Cullen, Wallace, Wilensky, Oberle, Thomson, Taylor & Harrison (2013), Jennings, Snowberg, Coccia, and Greenberg (2011). While all of these studies suggest an increase in mindfulness, some report findings more specifically in terms of significant levels according to one of the five facets of the questionnaire. For example, Frank et al (2015) note significant increases in the observing, non-reaction, nonjudgement, and awareness facets; Jennings et al (2013), signal significant improvement in two of the facets, observing and non-reaction; Schussler et al (2016) maintain significant findings in two facets (observing and non-reaction) as well as the overall mindfulness summary score, and Flook et al (2013), highlights a significant increase in the describe facet of the FFMQ; while Jennings et al (2011) suggests significant findings across all five facets of the scale. It is noted that only one of the studies reviewed reported significant findings across all five facets. It is also noted, however, that in all of the studies reviewed that used the FFMQ, at least one of the facets was found to have a significant impact on mindfulness. In summary, these studies form part of the literature that demonstrate and support the argument for using the FFMQ for this study.

2.4 COUNTER-ARGUMENTS

2.4.1 Deviation from the Buddhist concept of mindfulness

Dreyfus (2011) draws on the Buddhist tradition, and maintains that although definitions such as those offered by Kabat-Zinn (2003) may be useful for practical instruction in more western, secular contexts, there are flaws to it. He claims there is a lack of emphasis, in Kabat-Zinn's conceptualisation, on being able to hold the past in mind, and that judgment forms an essential, distinct quality to the mindfulness process. He believes that a "central feature of mindfulness is not its present focus but its capacity to hold its object and thus allow for sustained attention, regardless of whether the object is present or not" (p. 41). It is being able to retain the object, according to Dreyfus, which ultimately allows one to bring this object under focus so that one is able to remember it later. Furthermore, Dreyfus argues that instead of a non-judgmental focus to mindfulness, there is an implicit cognitive focus that relies on evaluation, which is critical to the theoretical underpinnings of Buddhist mindfulness. He states that this is ultimately:

what leads to the development of clear comprehension, a decisive aspect of the practice of mindfulness that allows the practitioner to evaluate the various aspects of his or her experience and to distinguish, for example, between wholesome and unwholesome mental factors (p. 51).

2.4.2 Mindfulness and virtuous qualities

In line with Dreyfus's argument, is the concern that the moral virtues (for example, generosity, loving-kindness and compassion), which are at the heart of the Buddhism, are lost, and/or undermined (Hyland, 2017). This is particularly pertinent to the mindfulness-based interventions that have become "commodities", marketed in secular contexts, varied and condensed to optimise efficiency, aiming to quantify outcomes, and employed as strategies to control human capabilities, in possibility non-ethically aligned environments such as the military.

2.4.3 Mindfulness for human consumption

There is also an increasing concern regarding the perception of mindfulness and how it is being 'marketed' in contemporary society (Hyland, 2017). There is the suggestion that several mindfulness-based interventions, do not truly uphold the moral and virtuous essence of the practice, which ultimately sustain and promote the ethical foundation of mindfulness. The way in which mindfulness has become popularised is commonly referred to as "McMindfulness", which is the term used to epitomise the way in which mindfulness practices have been commercialised, and sensationally portrayed as a new-age, self-help gimmick (Hyland, 2017; Purser & Loy, 2013). Writing in *The Huffington Post* online, Purser and Loy (2013) argue that:

To become a genuine force for positive personal and social transformation, it must reclaim an ethical framework and aspire to more lofty purposes that take into account the well-being of all living beings.

In an interview for the Buddhist Review with Catherine Kerr⁴, a leading neuroscientist and mindfulness researcher, Linda Heuman (2014), reports how Kerr describes the positive mindfulness trend, and the danger of the over-zealous depiction of mindfulness in society. Kerr cautions people to base their evidence on controlled clinical trial data; and when making decisions about well-being to hold the uncertainty in mind, that there is no fool proof guarantee that a mindfulness intervention will solve their issue(s). Furthermore, she explains that mindfulness is not for everyone, and when choosing whether

⁴ Catherine Kerr (n.d.) was Director of Translational Neuroscience in the [Contemplative Studies Initiative](https://vivo.brown.edu/display/ck5) at [Brown University](https://vivo.brown.edu/display/ck5) (<https://vivo.brown.edu/display/ck5>).

to engage in a mindfulness intervention, one needs to do so in the context of intervention options available.

2.4.4 Possible negative effects

Dobkin, Irving and Amar (2012) raise questions around the possible ‘harm’ MBIs could cause or trigger in participants. Although the intention of every mindfulness facilitator needs to be to ‘do no harm’, the term ‘harm’ can mean different things to different people, for example what some may consider to be painful and ‘adverse outcomes’ another may consider as enriching and soul searching. They also note that the facilitators’ training is imperative and that harm can be caused inadvertently though a “lack of knowledge or experience, human error, and more rarely negligence” (p. 45). While MIs are not therapeutic interventions *per se*, they may provide participants with an internal space from which uncomfortable feelings may arise, and this can stir emotions, making things seem worse before they get better. Participants who may find it difficult to participate or who may be vulnerable to negative experiences, may include those in extreme physical pain, clinically depressed individuals, people who have experienced trauma, or substance abuse, those with chronic mental health issues (Dobkin et al, 2012).

2.5 DISCUSSION

Although this research is aligned with Kabat-Zinn’s (2013) theoretical notion of mindfulness, it is useful to consider the possible limitations to how one defines and conceptualises mindfulness (Dreyfus, 2011, Hyland, 2017), as well as the expectations that may arise from its popularisation (Heuman, 2014).

2.5.1 Addressing mindfulness in relation to Buddhism

Dreyfus’s analysis is useful in that it highlights the debate that has evolved concerning mindfulness and its association (or deviation) from Buddhist tradition. The key difference between Kabat-Zinn and Dreyfus is that Kabat-Zinn’s definition suggests an ‘emptying’ of the mind by focussing on the present moment, whereas Dreyfus argues for an object-centred approach. While objects (both physical and meta-physical) can be used to achieve mindfulness, it is essentially in not thinking about anything that mindfulness is achieved.

In response to Dreyfus, there is the recognition that mindfulness — as currently practiced — has typically been associated with the essence of Buddhist meditation, as well as other ancient and contemporary teachings, and certainly does not aim to undermine the way in which the Buddhist traditions have undeniably emphasised the simple and effective ways of cultivating and refining the human capacity to bring mindfulness into everyday living (Kabat-Zinn, 2003).

However, there is also the refutation of the notion that mindfulness is constricted to Buddhism. Rather, as Kabat-Zinn explains mindfulness essentially relates to the term *dharma* (Sanskrit word for teachings of Buddha), which is ultimately truly universal in nature, meaning that it is beyond the scope and practice of being exclusively Buddhist. He explains:

It is neither a belief, an ideology, nor a philosophy. Rather, it is a coherent phenomenological description of the nature of the mind, emotion, and suffering and its potential release, based on highly refined practices aimed at systematically training and cultivating various aspects of mind and heart via the faculty of mindful attention (2003, p. 145).

Hence, while (Dreyfus, 2011) may argue there has been a decontextualisation of mindfulness away from its Buddhist roots, other's (Williams & Kabat-Zinn, 2011; Kabat-Zinn, 2003) argue that rather there has been a recontextualisation of mindfulness. Williams and Kabat-Zinn (2011) claim that it is in this recontextualisation that mindfulness has been able to emerge, in its fullness, into fields such as psychology and medicine. Through this recontextualisation mindfulness has transitioned from being viewed as a “unitary term supported by other qualities to a collective term containing other qualities” (Hwang & Kearney, 2015, p 13). Kabat-Zinn's recontextualisation has emphasised the collective nature of mindfulness as a phenomenon, which contains rather than strictly associates itself with specific qualities (Hwang & Kearney, 2015). Kabat-Zinn (2003) also emphasises that in Asia there word for mind and heart is the same and therefore the term ‘mindfulness’ symbolically reflects both the qualities of mind and heart. He states, “mindfulness includes an affectionate, compassionate quality within the attending, a sense of openhearted, friendly presence and interest. He notes that anyone is able to be mindful as, “it is an inherent human capacity” (p.146).

2.5.2 Addressing the popularisation of mindfulness

This study recognises that mindfulness may have become popularised over the years in different professional, educational, medical and even corporate contexts. It also recognises that mindfulness interventions need to be carefully and systematically developed. The Mindfulness Based Stress Reduction (MBSR) intervention, which was originally developed by Kabat-Zinn in the 1970s at the

Medical Centre at the University of Massachusetts, is one such intervention. This intervention is an intensive training course in mindfulness as a means to promote self-care and enable people to live healthier and more adaptive lives and has become one of the leading benchmark-interventions due to its systematic, value-based, and thorough approach (Kabat-Zinn & Santorelli, 2014). There are a variety of different MIs available, as Kabat-Zinn and Santorelli (2014) explain, and although there is flexibility and room for appropriate modification within MIs, there are key principles and aspects of the MBSR that are important to consider in most contexts of teaching.

2.5.3 Addressing the possible negative effects

This study acknowledges that there may be certain risks associated with participating in a mindfulness programme, especially if a participant is already in a vulnerable state. Therefore, in order to mitigate such risks it is important that before any MBSR-type intervention there needs to be a pre-screening process with participants (Hanely et al, 2016). During this process the facilitator checks for possible factors that could make participation distressing; as well as to clarify expectations and to emphasise autonomy throughout the process. An example of a pre-screening process would include the following: 1) a check for pre-existing psychiatric problems, addictions, and Post Traumatic Stress Disorder, 2) participants with a history of psychopathology should seek treatment in conjunction with their participation, 3) expectations of time and effort commitments ought to be disclosed and discussed with participants before the intervention, 4) a referral database should be made freely available to participants should they require additional support beyond the scope of the mindfulness facilitator's competency, 5) participants should always be allowed the freedom of choice should any of the activities present as potentially problematic or harmful to them. This kind of pre-screening process is imperative to ensure that participants enter the programme with a basic understanding of what it entails, as well as for the facilitator to know what issues the participant may be grappling with, and to advise accordingly as to whether the programme is appropriate or not.

2.6 REVIEW OF THE CONCEPT OF COMPASSION

As mentioned in Chapter 1, this research incorporates the concept of compassion as something that can be enhanced by mindfulness, and can assist in the promotion of inclusive and transformative education in South Africa (Vandeyar & Swart, 2016; Waghid, 2004). Hence, this research recognises that compassion is a pivotal contributor to the learning process and the role teachers' play in the

classroom, and promotes the idea that compassion contributes to the way teachers are able to pay attention, and engage with students experiencing learning barriers. Moreover, as explained by Baer et al (2006), since mindfulness includes awareness and acceptance of all experiences, with an attitude of acceptance and nonjudging, this study sought to explore whether mindfulness can reinforce compassion.

As stated in Chapter One, compassion involves an emotional sensitivity and awareness of suffering, and a deep desire to relieve the suffering either experienced by oneself (self-compassion) or others (compassion towards others) (Neff & Dahm, 2014). It entails offering others patience, loving kindness, non-judgmental understanding and recognising that people are imperfect and make mistakes (Neff, 2003a). For compassion to exist there needs to be an acknowledgement of the pain associated with the suffering. Therefore, before one can act compassionately one needs to be able to experience and acknowledge the pain in either oneself or another. Hence, a pause is required, whereby the person steps outside of his/her usual frame of reference, and views the world from the standpoint of 'the other'. The point of pausing and acknowledging the suffering is what is associated with mindfulness.

2.7 MEASURING COMPASSION

The compassion scale used in this study is based on Neff (2003) and Pommier's (2010) conceptualisation of compassion. Neff conceptualises compassion based on three key components, namely, 1) Kindness: an understanding to others in instances of failure or suffering instead of being critical or indifferent, 2) Common Humanity: to see other's suffering and pain as part of the human experience as opposed to being a separate event, and 3) Mindfulness: holding painful thoughts and feelings in a balanced way where one does not over-identify with the suffering, but where one also does not deny it either. There is a symbiotic relationship between the three components, with mindfulness forming the foundation for kindness and common humanity (Pommier, 2010). The antithesis of these three core components is instructive: Kindness is juxtaposed with Indifference, Common Humanity with Separation, and Mindfulness with Disengagement.

Based on the three primary components of compassion (kindness, common humanity, and mindfulness) Pommier (2010) has developed a scale that measures *compassion towards others*, and is based on six subscales. These subscales are: kindness, common humanity, mindfulness, indifference, separation, and disengagement. The first three are positively scored with the latter three

being reversed scored. Although, this research study utilises the basic formulation of the Compassion Towards Others Scale, it has been noted by the authors, Neff and Pommier, that the scale validation paper is still being written up and will probably only be published in the near future (Neff, personal communication, 19/4/2016). Given this, the research is based on Pommier's (2010) current findings.

Given the recent development of the Compassion Towards Others Scale, the researcher did not find existing studies utilising such a scale. However, several studies have used compassion scales when introducing an MI. Studies within the field of mindfulness and education, measuring levels of teacher self-compassion include:); Taylor, Harrison, Haimovitz, Oberle, Thomson, Schonert-Reichl & Roeser (2016); Beshai, McAlphine, Weare, & Kuyken (2015); Frank, Broderick, Cantrell & Metz (2015); Flook, Goldberg, Pinger, Bonus and Davidson (2013); Roeser, Schonert-Reichl, Jha, Cullen, Wallace, Wilensky, Oberle, Thomson, Taylor, & Harrison (2013). All of these studies are MBI studies with a compassion component to them (refer to Appendix H). While most of these studies adopt Neff's (2003) Self-Compassion Scale, the last two studies adopted different self-compassion scales namely respectively the Occupational Self-compassion Scale and Santa Clara Brief Compassion Scale. These scales are not appropriate in the context of this study — the Santa Clara scale includes the issue of love and the Occupational scale was unavailable to the researcher at the time of the preparation of this research — and therefore not reviewed further.

2.8 COUNTER-ARGUMENTS

Although this study is guided by the research that promotes the idea *self-compassion* is associated with *compassion towards others* (Neff & Pommier, 2012; Pommier, 2011), it also recognises that some researchers (Strauss, Taylor, Gu, Kuyken, Baer, Jones, & Cavanagh, 2016) suggest that more evidence may be needed to fully substantiate this associative premise, and hence are hesitant to relate the conceptualisation of *compassion towards others* to the conceptualisation of *self-compassion*. Furthermore, based on the analysis of existing compassionate questionnaires, Strauss et al (2016) propose a five component compassionate model, namely 1) recognition of suffering; 2) understanding its universality; 3) feeling sympathy, empathy, or concern for those who are suffering (described as emotional resonance); 4) tolerating the distress associated with the witnessing of suffering; and 5) motivation to act or acting to alleviate the suffering.

2.9 DISCUSSION

These alternative concepts of compassion are not fundamentally at odds with the concepts of compassion adopted by the researcher in this study. While Strauss et al.'s (2016) research findings and proposed definition contribute to the broader knowledge base of compassion, their research still lacks empirical testing as well as the development of a measure of compassion. Therefore, although there may be merit in their hesitance there is also a lack of evidence mitigating the association between compassion to self and compassion to others. Together with other factors — such as the nature of this study, the type of group recruited (a cohort of participants 91% female, all same low level experience of meditation, from the same teaching environment, and all adults over the age of 21 years), the proposed association between compassion and mindfulness (Neff, 2003), as well as Pommier's (2010) developed measure, with pending validation evidence — this has led the researcher toward adopting the notion of *compassion towards others* as well as the related measure.

2.10 KEY MINDFULNESS INTERVENTIONS WITH TEACHERS

There are various clinical interventions that can be used to treat a variety of psychological and physical disorders and for reducing stress levels in healthy people (Chiesa & Malinowski, 2001). When it comes to using mindfulness in this regard, four commonly referred to mindfulness practices include: Mindfulness Based Stress Reduction (MBSR), Mindfulness Based Cognitive Therapy (MBCT), Dialectical Behaviour Therapy (DBT), and Acceptance and Commitment Therapy (ACT). MBSR and MBCT both utilise modern group-based standardised meditations as part of the development/cultivation of mindfulness in practitioners; while DBT and ACT meditation teach mindfulness skills without an explicit focus on formal meditation practice. The details of these modalities are not elaborated on in this review since these focus on clinical application. However, it is essential to point out that in the mindfulness programmes discussed below, particularly MBSR (see Appendix I) and to a lesser extent MBCT form an underpinning for the structure and activities undertaken within these programmes.

Although there are several mindfulness programmes on offer that teachers may benefit from this literature review discusses four international programmes (Weare, 2014, Meiklejohn et al, 2012) that have been designed specifically to address teacher well-being: 1) Mindfulness in Schools Project

(MiSP), 2) Cultivating Awareness and Resilience in Education (CARE), 3) Mindfulness-Based Wellness Education (MBWE) and 4) Stress Management and Relaxation Techniques (SMART) in Education.

2.10.1 MiSP

The Weare (2014) report formed part of the basis for the Mindfulness in Schools Project (MiSP) that runs training courses for teachers. These courses are known as *.b Foundations*, and for students known as *.b* (11-18 years), and *Paws b* (7-11 years). The underlying reasons why the *.b Foundations* programme was specifically created for teachers as stipulated in the Weare report, first, that mindfulness enhances the well-being and resilience of staff, and second, that teachers need to have experienced and understood mindfulness personally, before they are expected to teach it to students. The *.b Foundations* course for teachers, run by a qualified mindfulness trainer, takes place over the course of 8 weeks, for 90-minute sessions per week, and schools provide the group of staff members and venue for the course. In addition, participants are encouraged to complete twenty minutes daily practice following guided mindfulness meditations at home. The curriculum is based on the main mindfulness principles found in MBSR and MBCT. The *.b Foundations* course has been redesigned to make the course accessible and effective for adults in schools, and has some different aspects to it such as key attitudes and concepts are introduced visually and kinaesthetically. The teachers are trained in a manner that is specific to the context in which colleagues and potentially line managers may be learning mindfulness together. MiSP provides training to adults, who in turn teach mindfulness courses to students at school. There are currently over 2,000 teachers who have been trained to teach *.b* to students, 600 to teach *Paws b*, and 250 to teach *.b Foundations*. While it originated in the United Kingdom, it is now operational in the United States, Canada, Australia, Ireland, Poland, Netherlands, Czech Republic, Norway, Spain, Thailand, China, and Japan. The programme is supported by key mindfulness figures such as John Kabat-Zinn and Mark Williams. Hence, no teacher is able to train to teach mindfulness to students or adults without having completed the pre-requisite courses such as *.b Foundations* and relevant Teach programme (either Teach *.b*, Teach *Paws b*, or Teach *.b Foundations*).

2.10.2 CARE

In 2004, the Garrison Institute of New York developed a contemplative teaching and learning initiative, now referred to as the Cultivating Awareness and Resilience in Education (CARE) for Teachers programme. The aim of the programme is to assist teachers “reduce stress and enliven their teaching by promoting awareness, presence, compassion, reflection and inspiration — the inner resources they need to help students flourish, socially, emotionally and academically” (<https://www.garrisoninstitute.org/signature-programs/care-for-teachers/>, 11 July 2016). Empathy and compassion are promoted throughout the programme through caring practices and mindful activities. CARE employs basic mindfulness activities, such as short periods of silent reflection, and develops the practice of mindfulness to be used in challenging situations and experiences teachers face. The activities aim to promote and encourage a state of calm and awareness in the classroom and to enhance teacher-student relations as well as the way in which the curriculum is implemented. The programme is presented over four day-long sessions that are spread out over four to five weeks. Coaching (telephonic or internet) takes place between sessions, which provides teachers with the opportunity to practice and apply new skills learnt. “The program (sic) involves a blend of didactic instruction and experiential activities, including time for reflection and discussion” (<http://www.care4teachers.com>, 11 July 2016).

2.10.3 MBWE

Mindfulness-Based Wellness Education (MBWE) is an eight-week mindfulness programme designed to cultivate awareness of one’s health and welling — physically, mentally, emotionally, spiritually, and ecologically. It was formed at the Ontario Institute for Studies in Education of the University of Toronto (OISE/UT) in 2005 (Meiklejohn et al, 2012) as a response programme to the high rates of teacher stress and burnout. It is taught as part of the initial teacher education course at OISE/UT and is a nine-week component of the elective course entitled, “Stress and Burnout: Teacher and Student Applications”. It was designed by Poulin, Mackenzie, Soloway and Karayolas (2008) specifically for human service professionals, and based on the Kabat-Zinn’s MBSR programme.

2.10.4 SMART

Stress Management and Resiliency Techniques (SMART) is a programme currently managed by smartUBC, as part of the Education Faculty at Canada's University of British Columbia (UBC) (<http://smart-in-education.org/>). SmartUBC is responsible for ensuring that the programme is regularly updated based on evidence-based research. The programme is facilitated by smartUBC accredited instructors who utilise experiential mindfulness activities such as secular meditation, emotional awareness, self-regulation, and movement. In addition to the activities, presentations and group discussions are held and home-based exercises are encouraged. The non-religious, non-sectarian programme is offered to groups comprising of a minimum of 12 and maximum of 25 participants, who meet for eight weeks, with each week consisting of a two-hourly workshop sessions, as well as one 4-hour silent Saturday retreat. The SMART programme is modelled on Kabat-Zinn's MBSR programme, which highlights three underlying curriculum elements: 1) Concentration, Attention and Mindfulness; 2) Awareness and Understanding of Emotions; and 3) Empathy and Compassion Training (Meiklejohn et al, 2012). The aim of the SMART programme is to promote teacher wellness, attentiveness, and compassion; enable effective stress management strategies; improve interpersonal communication skills, and develop awareness and resilience, through 1) a greater understanding and control of emotions, 2) creating effective strategies for coping with challenges situations, 3) enhancing concentration and executive functioning (planning, decision-making, and impulse-control), 4) improving mental and physical health 5) revitalising purpose, 6) reinforcing healthy mind habits, and 7) enabling teachers to support students participating in mindfulness programmes.⁵

This discussion of the predominant mindfulness programmes for teachers highlights a number of key issues. First, that there is a concentration of initiatives in North America. Second, that there is a growing number of initiatives. Third, that institutions are investing significant resources in the development and elaboration of these programmes as an approach to enhancing teacher well-being. Where the discussion turns to next is to the efficacy of some of these, and other mindfulness interventions with teachers, as this has been studied and is reflected in the empirical literature.

⁵ Mindfulness in Schools Project (www.mindfulnessinschool.org), Mindful Schools (www.mindfulschools.org), Association For Mindfulness in Education (www.mindfuleducation.org), Mindfulness in Education Network (www.mindfuled.org), The Mindfulness Institute (www.mindfulnessinstitute.ca), Wake-Up Schools (www.wakeupschools.org), Mindful Teachers (www.mindfulteachers.org), Still Quiet Place (www.stillquietplace.com/), Sfat Hakeshev (The Mindfulness Language), Inward Bound (iBme) Mindfulness Education, (www.ibme.info), Inner Resilience Programme (innerresilience-tidescenter.org), and Centre for Mindfulness in Medicine, Health Care and Society (www.unassmed.edu).

2.11 MAPPING THE FIELD

Over the past decade a rich body of literature has emerged that addresses mindfulness and teachers. Surprisingly perhaps, no studies have been performed in South Africa. This section of the review showcases the key findings from this literature (tabulated in more detail in Appendix H). By showcasing the literature, the type of study and significance of findings is highlighted, which provides an important empirical basis for the performance of the present study.

2.11.1 Studies on mindfulness programmes for teachers

Building from the previous section's discussion, in 2012 Meiklejohn and colleagues published a detailed research paper entitled, *'Integrating Mindfulness Training into K-12 Education: Fostering the Resilience of Teachers and Students'* based on the rapidly increasing interest in the benefits of mindfulness practice. The research study reviewed current research and curricula on the integration of secular mindfulness training in the K-12 education system.⁶ The article highlights three different approaches in how mindfulness can be integrated into the classroom: first, an indirect approach, whereby teachers develop their own personal mindfulness practices, and embody these practices in their attitudes, and behaviours as they go about their daily activities; second, a more direct approach, where teachers teach mindfulness exercises and skills to students; and third, a combination approach, where teachers have their own personal practice and embody mindfulness in everyday activities, as well as teach mindfulness skills to the students. (In terms of the programmes described in section 2.2 above, the MiSP programme is a 'combination' approach, whereas the other three follow an indirect approach. Meiklejohn et al (2012) note that these three programmes "share a tendency to build from personal mindfulness practice, such as listening more deeply and developing emotional awareness, empathy, and compassion in the classroom" (p. 5).)

Weare's (2014) report *'Evidence for mindfulness: Impacts on the wellbeing and performance of school staff'*, motivates for the usefulness of mindfulness for teachers. The report provides a summary of the beneficial findings that thirteen different studies (many of which are discussed in Appendix H), published in peer-reviewed journals of mindfulness with school staff, have provided. The benefits of

⁶ The K to 12 Programme covers Kindergarten and 12 years of basic education.

mindfulness for teachers from the Weare (2014) review are summarised as follows: reduction in stress, better mental health, greater wellbeing, increased kindness and compassion, better physical health, increased cognitive performance, and enhanced job performance. The report concludes its literature review by drawing attention to the potential mindfulness has to positively impact the lives of teachers.

Mindfulness has the capacity to improve staff occupational wellbeing and job satisfaction, improve performance, and reduce the wasted expenditure and human misery represented by the many days of stress related sickness and attrition from the teaching profession. The evidence base for the beneficial impact of mindfulness on the young is growing rapidly and students clearly need teachers skilled in mindfulness to teach it (Weare, 2014, p. 18).

An important point that the Weare report highlights is that “staff need first to learn mindfulness themselves”, and that in order to effectively teach mindfulness directly in the classroom, it is imperative that teachers receive “solid and exact training to support them” (2014, p.7). This point is more extensively discussed by Crane et al (2010) who explain that, like all psychological approaches that place strong emphasis on thorough training to be a therapist, mindfulness approaches are the similar in that mindfulness trainers need to undergo a rigorous training process. Given this, while teachers may be tempted to implement mindfulness training in the classroom, they ought to be cautioned of the importance of the training process, particularly given that mindfulness practices, while simple, can be powerful experiences that may give rise to a range of thoughts and emotions (Weare, 2014). Crane et al (2010) provide an explanation as to why teachers need this training:

The quality of the teaching (and therefore the training of the teacher) is a key ingredient associated with the delivery of successful outcomes for participants. The distinctive aspect of this in the current context is the emphasis placed on a particular form of development process — the teacher’s embodiment of the key ‘therapeutic ingredients’ of MBCT/MBSR and the personal mindfulness practice that supports this (p.76).

While this study does not aim to train teachers to teach mindfulness in the classroom, the importance of teacher training is incorporated for two reasons. First, to promote awareness that teachers teaching mindfulness to others, be they students, colleagues or adults, need to be aware of the intense personal process of discovering their own experience through the lens of mindfulness practice, on an ongoing basis (Crane et al, 2010). Second, to highlight that this research study ensured that a qualified trainer, who completed a two year mindfulness training programme offered by the Mindfulness Institute of South Africa in collaboration with Stellenbosch University, was recruited to conduct the mindfulness intervention in this study, precisely because of the reasons stipulated by Crane et al (2010) and Weare (2014).

School staff need to themselves experience sufficient high quality education in mindfulness from well-educated trainers, and have a regular personal practice, in order to become skilled and authentic teachers of mindfulness and avoid doing harm (Weare, 2014, p. 3).

2.11.2 Analysis of mindfulness intervention studies with teachers

This section refers to the 16 studies tabulated in Appendix H, which span from 2004 to 2016. These studies represent sample populations from the North America and Europe. The studies are described and compared below with reference to their designs and reported outcomes.

2.11.2.1 Design types

Twelve of the fourteen studies reported in Appendix H made use of intervention and control/comparison groups and most were quasi-experimental in design. While in some studies participants were randomly assigned to intervention or control groups, in other cases researchers chose alternative ways to allocate participants to groups. One study conducted an informational presentation to all participants and then allowed participants to choose whether they would like to participate in either an intervention or comparison group (Beshai et al, 2015). Two studies controlled the gender allocation of participants; Franco et al (2010) ensured equal allocation of men or women per group while Gouda et al (2016) selected a single gender of participants. Two studies allocated participants according to school location (Flook et al, 2013; Poulin et al, 2008).

2.11.2.2 Sample sizes

For the quantitative studies, sample sizes varied, Beshai et al (2015) and Kemeny et al (2012) used larger groups of participants (N=89 and N=82 respectively) while other studies such as Gold et al (2010) and Flook et al (2013) used smaller groups (N=11 and N=18 respectively). Experimental and Control groups were generally evenly matched in terms of number of participants. Sample sizes were also partially determined by the design type and research methodology adopted.

2.11.2.3 *The use of self-reported measures*

All of the studies cited in Appendix H used participants who voluntarily signed-up for the studies implying that there was an initial interest and willingness from participants to change. Quantitative outcomes were based on self-reported measures, although some studies such as Flook et al, 2013; Kemeny et al, 2012, and Roeser et al, 2013 did make use of additional measures such as experimental tasks or physiological indicators. While self-reported measures are easy ways to measure experiential outcomes, their validity may be threatened by the impact of social desirability and honesty (when participants want the outcome to favour a particular direction), participant interpretation of questions or words, the mood of the participant on the day, different standards of rating scales — that is, some participants tend to extremes or answer in a positively favourable manner (Crano & Brewer, 2002; Bergomi et al, 2012). In addition to the statistical analysis conducted in the studies, many of the studies also included an element of qualitative input through focus group discussions or individual interviews (Ancona & Mendelson, 2014; Jennings et al, 2013; Roeser et al, 2013; Gold et al, 2010; Jennings et al, 2011; Poulin et al, 2008).

2.11.2.4 *Concluding outcomes from studies*

Teachers who completed the mindfulness interventions demonstrated significant improvements in relationship to control/comparison groups in the areas of stress and burnout (Beshai et al, 2015; Ancona & Mendelson, 2014; Flook et al, 2013; Jennings et al, 2013; Roeser et al, 2013; Manas et al, 2011; Jennings et al, 2011; Gold et al, 2010), teacher self-efficacy (Frank et al, 2015; Jennings et al, 2013), self-compassion (Beshai et al, 2015; Frank et al, 2015; Roeser et al, 2013; Flook et al, 2013;) and mindfulness (Gouda et al, 2016; Beshai et al, 2015; Flook et al, 2013; Frank et al, 2015; Jennings et al, 2013, 2011; Kemeny et al, 2012; Poulin et al, 2008). While Gold et al (2010) lacked a control group they also employed a pre-post intervention design and reported significant improvements in the mindfulness facet of acceptance without judgment. Napoli (2004) was the only study included in this review that was solely based on qualitative results with no statistical analysis. This study offered valuable themes that were extrapolated by the researcher, such as curriculum preparation and workload management, conflict and anxiety management, implementing change in the classroom, and improved quality of life. Classroom behaviours were also favourably reported in two other studies that highlight improved student-teacher engagement and classroom management (Flook et al, 2013; Jennings et al, 2013).

2.11.2.5 Discussion

From the literature included in this review, the research results appear to all find something positively significant to report on with regards to levels of mindfulness with teachers or the other specific measurable outcomes.

When studies used the FFMQ it is noted that only very rarely was there a significant increase in all five facets of mindfulness. One case that did find significant findings across the five facets of the questionnaire was Jennings et al (2011), who found “significant ($p < 0.10$) improvement at post-test for the five facets of the Five Facet Mindfulness Questionnaire”.

The lack of uniformity in research methods, as well as the different measures employed and research questions underpinning the research makes comparability more challenging across the various studies. Furthermore, as the earlier discussion on the conceptualisation of mindfulness suggests, it is difficult to compare and evaluate different programmes based on different non-standardised conceptualisations of mindfulness programme designs.

While several of the studies adopt MBSR-type programmes running over 8-10 weeks, there are other programmes which have been included in the review that adopted other mindfulness-type interventions, such as the CARE programme, previously discussed under section 2.10.2 (Jennings et al, 2013; 2011), the Flow Meditation Programme (Manas et al, 2011; Franco et al, 2010), and the Mindfulness in Yoga Programme designed by Holistic Life Foundation (Ancona & Mendelson, 2014). For the purposes of this research, with relevance to working with teachers, there is a lack of research evidence substantiating the use of the latter two programmes, and hence the focus of this review remains on MBSR-type programmes. Please refer to Appendix I for details of how the programme came into existence, what it aims to achieve, and how it is structured.

2.11.3 Mindfulness research in South Africa

Although this literature review focuses on mindfulness and teachers, from the background research conducted for this project, there appear to be no research studies exploring the impact of mindfulness programmes implemented specifically with teachers in South Africa. However, there are several South African published articles (as available in 1 October 2016) on the broader topic of mindfulness. A brief

synopsis of this body of work is provided below, followed by a set of remarks that point to why even a modest study on mindfulness in a South African school setting is a timely and an empirically useful undertaking in 2017.

Most recently, Steyn et al (2016) have published an article in the *Journal of Psychology in Africa* exploring the **efficacy of a mindfulness intervention with a group of music students**. The non-random allocation of 36 participants resulted in 21 participating in the intervention group and 15 participating as part of the control group. Self-reported questionnaires were administered pre and post the seven-week intervention measuring psychological well-being, psychological skills, mindfulness, and performance anxiety levels. The pre-post results indicated that self-confidence levels significantly increased, suggesting that mindfulness can positively influence self-confidence. They write: “In conclusion, psychological skills for mindfulness training appear to have potential as a resource to *improve psychological wellbeing for managing performance anxiety during high performance activity*” (p. 170). The authors also noted the limitation of using a quasi-experimental design given that participants were not randomly assigned to intervention or control groups.

Whitesman and Mash (2015) examined the effects of a **mindfulness-based professional training module on mindfulness, perceived stress, self-compassion and self-determination** on a group of 23 participants training to be mindfulness teachers.⁷ The authors claim that teaching mindfulness-based interventions requires teachers “to embody the practice of mindfulness and acquire pedagogical competencies” (p. 220). The part-time training programme⁸ consists of four modules, each module lasting 8-10 weeks, with a blend of residential retreats and e-learning. The objective of Whitesman and Mash’s study was to explore the first nine-week module of the training programme with the 23 participants who agreed to participate. While there was no control group, which limited the study’s validity, the results did indicate significant increases in pre-and post-differences for all four mindfulness practices measured (observing, describing, acting with awareness and accepting without

⁷ Dr Whitesman, a medical general practitioner (MBChB) and prominent pioneer of mindfulness in South Africa, has received certification as a teacher in MBSR from the University of Massachusetts Center for Mindfulness and in psychoanalytic psychotherapy from the South African Institute for Psychotherapy, and is now Director and Chairperson of the Institute for Mindfulness South Africa (IMISA). (<http://www.mindfulness.org.za/directors-chairman/>).

⁸ In 2014 IMISA, in collaboration with Stellenbosch University Faculty of Medicine and Health Sciences, launched the first South African University-Based Certificate Training in Mindfulness-Based Interventions (MBIs). “The course will serve to build medium and long-term capacity and career paths in MBI’s in South Africa. Our vision is to develop a new generation of practitioners and trainers and mainstream the practices, ethics and applications of mindfulness-based approaches into the broader healthcare fraternity in South Africa, and beyond that into education, communities and business” (<http://www.mindfulness.org.za/training/>).

judgment) and self-compassion. Furthermore, there was also a *significant decrease in self-perceived stress*. The self-determination score, which was already high at baseline, did not yield any significant changes. Although the researchers state that they aim to complete a further study once participants have completed all four modules, the results of this study suggest that potential teachers gained significantly from the first module of the training programme.

Abdool Karrim Ismail et al (2013) published an article in the *Journal of Contemporary Management* entitled, '**Towards gaining a competitive advantage: the relationship between burnout, job satisfaction, social support and mindfulness**'. This article explores the relationship between burnout, job satisfaction, social support and mindfulness in a South African corporate banking organisation. The results deduced demonstrated a *significantly moderate inverse correlation between mindfulness and burnout*. After careful analysis of the results, the authors concluded, "mindfulness can be a source of employer value proposition and may in the long run provide organisations with a valuable tool to manage high burnout levels of employees within the workplace" (p. 462). This study signifies the need for further research to explore the promotion of employee well-being, whether it be with employees based in corporate institutions or educational, and/or, governmental or not for profit organisations.

Edwards & Edwards (2013) investigated the **psychotherapeutic value of five sessions of alpha theta meditation training** with a group of six participants in clinical, health and sport psychological contexts. Specific changes in consciousness were analysed with regards to neurophysiology, mood, mindfulness, health and spirituality. While qualitative and quantitative findings provide some support for the alpha theta protocol as a training tool, more significant neurophysiologic effects need to be demonstrated in future research to promote the implementation of alpha theta training.

While this literature review has not delved into current neuroscientific research advocating mindfulness, the following study below by Ives-Deliperi, Solms & Meintjes (2010) links into international research studies that have examined the plasticity of the brain, and the effects of mindfulness training on brain activity in higher cortical functions (Davidson & Lutz, 2008; Davidson et al, 2003), and the effects of mindfulness on the mind, brain, body, and behaviour (Greeson, 2009). Ives-Deliperi, Solms, & Meintjes (2010) conducted a neurological research study on the **effects of mindful meditation, by using functional magnetic resonance imaging (fMRI) to locate brain regions involved in state mindfulness** and to highlight its mechanisms of actions. The authors aimed to investigate whether mindfulness could achieve positive health outcomes of and promote

psychological wellbeing through disidentification. Disidentification is linked to emotional regulation and can be described as “a process that arrests any permanent sense of self and suspends related habitual thoughts and behavioral patterns; momentary events and thoughts are merely registered without ensuing judgment or cognitive elaboration” (p. 239). Furthermore, the process of disidentification enables a process whereby “the self begins to be experienced as a dynamic system of concepts, images, sensations and beliefs rather than as an enduring entity” (p. 232). The findings demonstrated that “*mindfulness meditation has an overall ‘quieting’ effect on the brain regions associated with subjective and cognitive appraisal of emotions*” (p. 239). Given this, through a process of disidentification, mindfulness may stimulate positive health outcomes.

A teenager’s individual experience of mindfulness was explored by Dellbridge and Lubbe (2009), as a means to understand an adolescent’s subjective experience of mindfulness, with specific emphasis on the effects of the training. The qualitative data highlighted five themes, namely: “present-centred awareness and attention, attitude and heart qualities, self-regulation, universalism and mindlessness” (p 172). The findings suggested that the mindfulness training firstly made the individual more task-orientated, and secondly provided an opportunity for personal growth and development. Overall the findings indicated that mindfulness is an important aspect of holistic development and wellbeing.

In 2008 de Klerk-Luttig published an article in the *South African Journal of Education* entitled, **‘Spirituality in the workplace: a reality for South African teachers?’** The author first explored the concept of spirituality, emphasising the importance of teachers having an “experience of connectedness and a sense of personal wholeness and meaning in their lives, including their vocational lives” (p. 512). She claims that exhaustion limits the opportunity to develop spiritually and that many South African teachers have become spiritually stunted. As part of her suggestions to promote teacher spirituality she proposes that mindfulness is one way to enable greater awareness and to nurture a sense of connectedness both intrapersonally and interpersonally.

Whitesman (2008) published an article advocating for medical practitioners to be exposed to mindfulness-based interventions as way of developing a present-mindedness when dealing with clients. He maintains that while medical clinicians undergo rigorous information and knowledge training, there appears to be gap in training clinicians with the proactive skills to cope with the stress and strains of the job (administration, business management, psychosocial dimensions of illness and complex doctor-patient dynamics); yet the ability to cope with the challenges is what contributes to

effective performance over time. “It is self-evident that a doctor, who is present and attentive to the clinical tasks at hand, from surgery to general practice consultation, is more effective than a mindless one” (p. 14). He suggests that mindfulness, both as a practice and attitude, is a form of support that can equip clinicians with the necessary self-awareness skills to broaden their internal resources. Mindfulness is a means for medical professions to be attentive, open, and compassionate, both to themselves and clients, while applying their insight, technical abilities, listening, and decision-making skills. “In short, the clinician grounded in present-moment awareness is both good scientist and humane doctor, a condition which is congruent with the deepest values of medicine” (p. 14).

Grant (2005) developed an article for the *South African Journal of Higher Education* examining the **role of mindfulness in teaching and learning**. Mindfulness was specifically explored in comparison to mindlessness. “The mindful mindless equation impacts our lives as teachers and learners as potential partners in education and thus carries potentially positive and negative societal and educational consequences” (p.147). Grant highlights the importance of consciousness raising and developing new roles and responsibilities as co-educators to promote learner-centred, collaborative experiential learning. He argues that “what we are aiming for are interactive, connected citizens who want to be involved, committed and to grapple collaboratively towards societal well-being” (p.155) and that mindfulness is a useful tool to cultivate this aim.

From the literature provided it is evident that the topic of mindfulness as research area is gaining momentum in South Africa, with a higher concentration of studies appearing in the past five years than during previous five-year intervals. The literature surveyed shows diversity in the types of questions posed, the settings in which studies have been carried out, and the methodologies employed to deliver the research. Of particular interest, for this researcher, is that there is a body of research emerging that tests the utility of mindfulness interventions within different organisational settings, such as a bank or in the context of medical practice. What emerges, as a gap in the research literature is a study on whether a mindfulness intervention applied within a school setting could have a tangible impact on the practices of teachers.

In addition, several psychotherapists, psychologists, medical practitioners, and coaches have sought training in mindfulness and conduct courses in South Africa. From the researcher's online research, examples of such courses include:

- Mindfulness Leadership (<http://mindfulleadership.co.za>)
- Be-Awake (<http://be-awake.co.za>)

- Open the Heart and Still the Mind (<http://www.suecooper.co.za>)
- Mindful Self-Compassion (<http://www.clairebreen.co.za>)
- Mindful Revolution (<http://www.mindfulrevolution.co.za>)
- Introspect Mindful Insight (<http://www.mindfulinsight.co.za>)
- Mindspace (<http://www.sarahfoale.co.za>)
- The Mindful Company (<http://www.themindfulcompany.co.za>).

Most recently, within the area of education specifically, Jenny Canau, a teacher of mindfulness as well as the current director of Mindfulness Africa, worked closely with the National Professional Teachers' Organisation of South Africa (NAPTOSA) to develop an opportunity to offer teacher training in mindfulness (http://www.mindfulnessafrica.org/?page_id=120, as viewed on 8 August 2017). Naptosa approved the Mindfulness Based Living Course, which Jenny ran over eight weeks in August and September 2017, with a group of 20 teachers in Cape Town. The course offered 10 SACE (South African Council for Educators) CPTD (Continuing Professional Teacher Development) points to participants. It was noted that should this course be well received, Naptosa would promote this opportunity for teachers on a national level; the outcomes of the course are yet to be disclosed. The fact that this opportunity arose in 2017, further qualifies the need for evidence-based research behind promoting mindfulness courses with teachers, and therefore highlights the pertinence of this research study and the MI that this study introduced in 2016.

2.12 CONCLUSION

Pivotal to this study is an understanding of the core concepts of mindfulness and compassion, their measurement, and why mindfulness and compassion are associated in this study. Whilst unpacking the adopted definitions, counter arguments to both the definition and concept of mindfulness are presented and discussed. The chapter then reviews a series of studies in educational settings that have measured mindfulness as a possible outcome of the intervention's effectiveness. The different types of mindfulness interventions (MI) are discussed, and reviewed, with justification as to why an MBRS-type programme is adopted for the purpose of this study. Counter-arguments to mindfulness are also proposed. From this foundation the chapter explores how research findings, in the field of mindfulness, relate to supporting teachers' classroom practices. Furthermore, it assesses where mindfulness research is going in South Africa, and presents a case for more research in the field of mindfulness in education in South Africa.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

This chapter explains the research process introduced briefly in Chapter 1, and provides a full account of how the researcher addressed the research questions. In this context, the underpinning pragmatic paradigm is discussed in relation to the purpose of this study, which is to explore the role of mindfulness in supporting teachers. The research design and methodology are explained, and details of the data collection methods and data analysis processes are provided, as well as how these methods and analyses attempt to answer the research questions. Finally, issues of validity and reliability, both regarding the quantitative and qualitative components of the study, are discussed, and ethical considerations are noted and addressed.

3.2 RESEARCH QUESTIONS

In Chapter 1 the research questions were formulated with the aim of organising this research to the purpose of this study. The primary question is: What role does a Mindfulness-based Intervention (MBI) play in supporting teachers' classroom practices? As outlined in Chapter 1, through the application of secondary questions this research specifically investigated the following:

1. How effective is the programme at changing self-reported, quantitative levels of mindfulness and compassion in the classroom?

Quantitatively, this was formulated through the hypothesis that the intervention would significantly impact levels of mindfulness, with the null hypothesis being that the intervention would not significantly impact mindfulness. A separate hypothesis stated that the intervention would significantly impact

compassion towards students, and the null hypothesis stating that the intervention would not significantly impact compassion towards students.

2. What were the participants' subjective experiences of the MBI programme?

There is an absence of research evidence pertaining to MBI with teachers in the South African context (see Chapter 2). As such, this research aimed to present a MBI intervention programme with a group of school teachers in a school based in Cape Town in the Western Cape of South Africa. Using an exploratory, mixed methodological approach, this research project deployed a trained and certified mindfulness practitioner to apply the MBI in the school context.

The objectives of this research were thus to:

1. Determine whether the intervention will have a statistically significant impact on levels of teacher mindfulness and teacher compassion toward learners.
2. Capture how the participants experienced the MBI programme.
3. Explore if and how the practice of mindfulness might be able to support teachers in their professional capacity.
4. Modestly contribute to the knowledge base of mindfulness and education in South Africa and to serve as a preliminary study that can be developed further.

Additionally, this research is of use in establishing whether there is scope for further research and practical application of MBIs with teachers as a way of supporting them in their professional and personal capacity in the classroom.

3.3 RESEARCH PARADIGM

Paradigms are the basic philosophical beliefs and assumptions that guide the research inquiry from a broad, abstract level. They provide the overarching structure from which core ideas, theoretical frameworks, and research methods can develop (Creswell & Plano Clark, 2011; Terre Blanch & Durheim, 1999). Paradigms differ in how they perceive the nature of reality (ontology), in how knowledge is gained (epistemology), and how research is processed (methodology). This study works within a pragmatic paradigm, allowing for pluralism in the choice of methods (quantitative and qualitative) and encouraging conscious awareness of the choices I have made about the field of study

(ontology) that give shape to how the research outputs are constructed (epistemology) (Morgan, 2014; Wildemuth, 1993). Pragmatism as a paradigm can be distinguished from purely positivist or constructivist paradigms — to the extent that the former relies on deductive reasoning, objectivity and generality, and the latter on inductive reasoning, subjectivity and context — by its emphasis on abductive reasoning (continuous switching between deductive and inductive reasoning), intersubjectivity (that meaning is created through interaction and exchange), and transferability (the ability of knowledge produced in one setting to be applied in other) (Morgan, 2007).

This research uses a range of methods to collect data to best address the research questions. The aim of adopting both quantitative and qualitative research strategies allowed the focus of the research to address the research problem and the consequences of the research intervention in question as robustly and holistically as possible (Feilzer, 2010).

Pragmatism accepts, philosophically, that there are singular and multiple realities that are open to empirical enquiry and orientates itself toward solving practical problems in the “real world” (Feilzer, 2010, p.8).

This “real world” approach aims to capture elements from both the post positivist perspective that aims for an objective truth, as well as the constructivist perspective that aims to represent the relative truth of multiple realities. While this study does attempt to provide an account, which is as statistically meaningful as possible of how things are, it also aims to provide a rich description of the participants’ subjective realities. This combination of approaches is the result of a conscious effort by the researcher to address the phenomenon that is being studied in a holistic way. The merits of this approach are reiterated by Morgan (2014), who explains that, while *what* researchers do is an important element of the examination process, *how* researchers make choices and *why* they choose certain methods ought also to be incorporated in the examination of the object of study.

How does a pragmatic paradigm relate to the current study? In an attempt to address the questions outlined above, this study assesses the effects of a mindfulness intervention with a group of teachers, by measuring the levels of mindfulness and compassion before and after the intervention. However, it also aims to gain insight into the subjective experiences of the participants, first, to allow them an opportunity to comment on their experience of the MBI and, second, to allow them an opportunity to reflect on the experience of a) completing the questionnaires, b) what it means to be involved in a study and, c) what meaning the questionnaires might hold for them, if any. Simply applying a post positivist paradigm does not fully answer the primary research question, which implies that there is a

space for subjective, experiential commentary; and visa-versa, simply applying an interpretivist paradigm excludes the possibility of trying to quantify the effect of the MBI.

A mixed methods approach to the research acknowledges the layers embedded in the phenomenon under investigation, (in this study levels of mindfulness and compassion), and seeks to measure the different layers using appropriate means (Creswell & Tashakkori, 2007). Through this approach the researcher is able to reason abductively and shift back-and-forth between inductive and deductive positions, all the time with the aim of addressing the primary research question and the consequences of the outcomes of the intervention, to enhance the ultimate utility of the research findings.

Creswell & Tashakkori (2007) explain the importance of developing a strategy to integrate the two strands of qualitative and quantitative research. First each “strand” needs to be sizeable, and secondly it needs to be analysed appropriately, given that the different strands are each linked to a unique set of questions, data, and analysis. Once these two conditions are established, the aim is not to present two independent data sets, running parallel to each other, but rather to integrate the data findings. In this study, the data captured through the questionnaires will be linked to the type of questions asked in the focus group. This allows participants an opportunity to reflect on the questionnaire instruments, to provide a discursive space for describing the effect of the intervention, and finally to allow an opportunity to explore the relationship between the participants and the study, such as the effect of ‘social desirability’ (Rosenthal & Rosnow, 2008).

Hanson (2008, p.107) emphasises that “the relationship between the theory and method” underpins the legitimacy of the method. Therefore, the research question needs to govern the selection of the research method. Moreover, given the human element, data outcomes do not always fit the research question. Given this, the research question ought not to be changed, but rather the research methods or underlying theory ought to be reshaped and rethought (Feilzer, 2010; Hanson, 2008). In this way, pragmatism acknowledges the uncertainty of knowledge produced through research, and that it is relative as opposed to absolute. Therefore, researchers themselves need to be flexible and open to the changes that may unexpectedly present. Hanson (2008) concludes by stating that, ultimately, the researcher needs to ask, ‘Has this research helped me to find out what I need to know?’

Drawing on what Hanson (2008) explains, in this study the researcher wanted to gain quantitative self-reported scores, rating the experiences of mindfulness and compassion before and after the MIB, as well as insight into the experiences of the participants, to possibly glean further meaning of the

experience and quantitative scores. Hence, this links back to the primary research question, which is “what role does a MBI play in supporting teachers’ classroom practices?” Deploying a mixed methods approach allows for the findings to be analysed in relation to one another, as well as for the results to enhance the depth of exploration.

3.4 RESEARCH DESIGN

A research design is a strategic framework of action that guides the researcher on how to connect the research questions to the implementation of the research (Terre Blanche, Durheim & Painter, 2006). A research design is thus like an execution plan that includes critical decisions in how the research data will be collected and analysed to address the initial research questions.

A single case study has become a viable and well-accepted design for investigating a unit of analysis, or a bounded system, in social science disciplines involving people or programmes (Simons, 2012, Babbie & Mouton, 2006; Merriam, 1998; Yin, 1994). Given the pragmatic paradigm within which this study is located, a single case study is defined as a “detailed, intensive study of a particular contextual, and bounded phenomena that is undertaken in real life situations” (Luck et al, 2006, p. 104). To clarify any ambiguity that may arise when defining the ‘unit of analysis’, Yin (1994, p. 39) has devised a useful framework from which to explain the different types of case study designs. He illustrates this in a two-by-two (2x2) matrix, where the horizontal axis represents single and multiple case designs, and the vertical axis differentiates between holistic and embedded designs. Within single and multiple case designs, there can be a unitary or multiple units of analysis (see Figure 3.1).

	Single case study research designs	Multiple case study research designs
Holistic (single unit of analysis)	TYPE 1	TYPE 3
Embedded (multiple units of analysis)	TYPE 2	TYPE 4

Figure 1: Basic types of designs for case studies adapted from Yin 1994

Note: Single case is both the school and the MBI. The units of analysis are the individuals that make up the programme at the school.

For the purpose of this study a Type 2 design was followed, this is because although the single case study design applies as it is an the intervention with a specific group of teachers from one school, each individual is regarded as a unit of analysis (Yin, 1994). Yin (1994) and Simons (2012) explain that this allows the researcher to designate a unit smaller than the case for the purpose of analysis, as a means to build up the context of the case. Therefore, in this case study, the ‘unit of analysis’ is the group of staff members, bound by one school system participating in a MBI; the sub-units are the individual experiences of each staff member (Simons, 2012; Yin, 1994). Hence, the case (the experience of staff members participating in a mindfulness intervention at a school) is sub-divided into its component parts (the experiences of the individual staff members).

While the research design is aligned to that of a case study, this research will not focus on the specific school context or dynamics; hence the school context is only elaborated on in brief in Appendix J. This is due to each participant’s experience being treated independently. However, it is noted that this study is informed by the literature that assisted the researcher in formulating the study and making it comparable to other studies, as well as by the boundaries of time, geography, place, and event. Although, the researcher acknowledges Yin’s (1994) point that it is impossible to exclude the context in such an investigation — because at some stage the boundaries between phenomena and context inevitably blur — for the purpose of this research study, the focus will remain on the individual experiences, and the school context thus features less prominently.

The purpose of this single case study was to explore, both quantitatively and qualitatively, the experience of mindfulness with a group of teachers from a purposefully selected school. The motivations underpinning the exploration were 1) to satisfy my curiosity and desire to understand mindfulness practiced with teachers; 2) to review existing South African literature on mindfulness, as well as international literature based on mindfulness practices with teachers; 3) to ascertain the feasibility of undertaking a more extensive study on mindfulness interventions with teachers (Babbie & Mouton, 2006). Given the purpose of the study, a pragmatic paradigm was adopted, with techniques such as purposeful sampling to identify research participants at a school that indicated interest in the project, and mixed methods (qualitative and quantitative) to collect and analyse data (see Figure 3.2). More specifically, a mixed methods convergent parallel design was used, which means that the quantitative and qualitative data were collected separately but simultaneously (Creswell & Plano Clark, 2011). The reasons for this choice of design were twofold, first I had limited time for collecting data; second, I considered both data collection methods equally important as a means to answer the research question. Once each dataset had been separately analysed, the datasets were triangulated, in order for me to assess whether there was convergence of results or not. Thus, the integration of results forms the final data analysis step, in which a holistic discussion of the outcomes is developed.

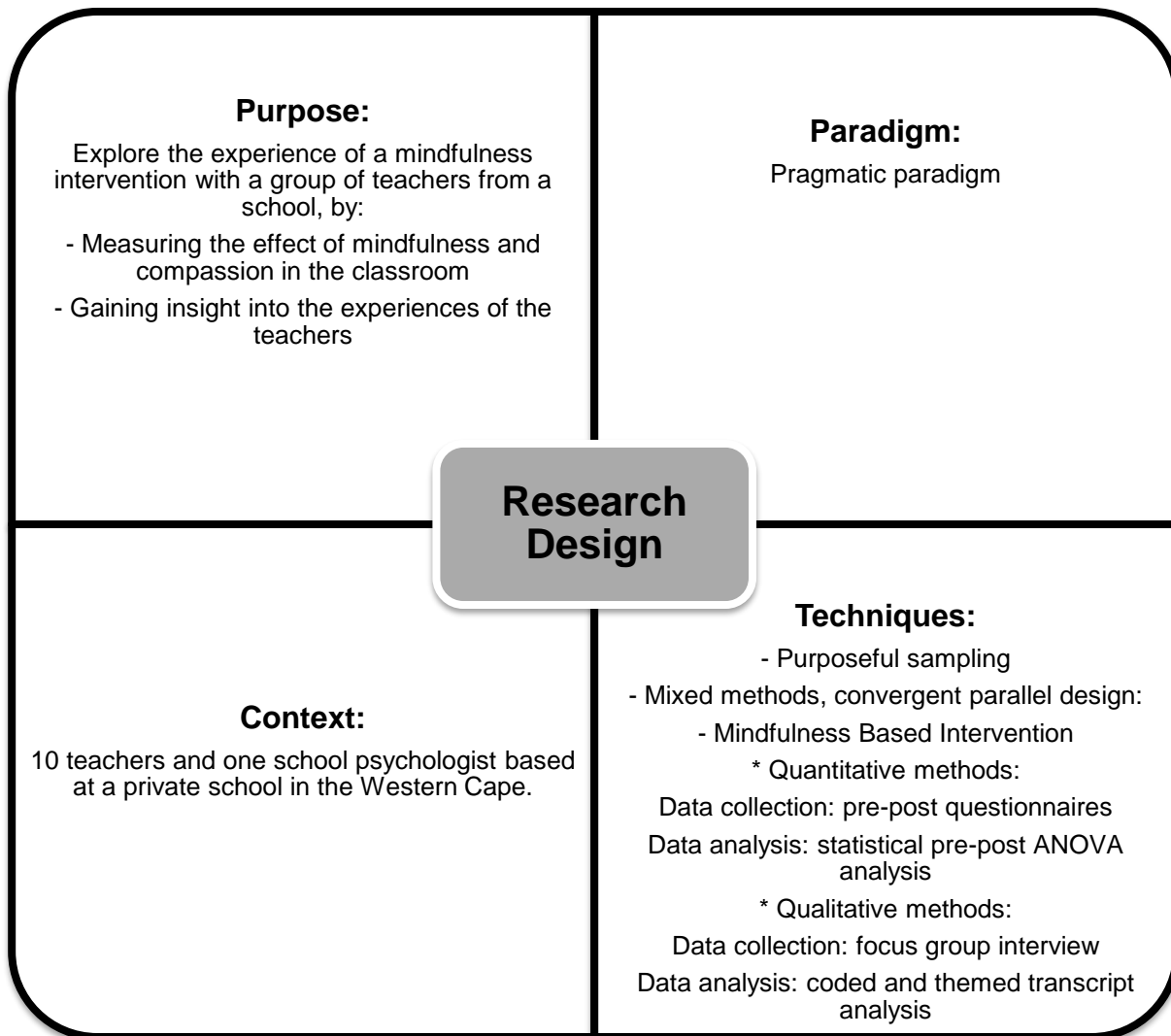


Figure 2: The research design of the current study adapted from Terre Blanche, Durrheim, & Painter, (2006)

3.4.1 Intervention

The Mindfulness Based Intervention (MBI) was devised by an independent and trained course facilitator, and was based on an eight-week programme structure. The programme was developed from teachings of the Mindfulness Institute of South Africa (MISA), which are generally aligned to that of the Kabat-Zinn's MBSR programme (see Chapter 2). For additional support, the facilitator recruited an assistant facilitator who was in the process of completing the mindfulness facilitator training through MISA.

The intervention involved a gradual introduction to a number of basic mindfulness practices that bring awareness to bodily sensations, emotions and thoughts. These practices included: body scan, sitting meditation, walking meditation and “Awareness of Breath” exercises. Over the course of the intervention, participants were invited to explore their relationship with, and engage with, the foundational attitudes of mindfulness, including: ‘beginner’s mind’, non-judgement, acceptance, letting go, non-striving, patience, trust, gratitude and compassion.

The intervention occurred during the third academic term of 2016, from week two until week nine of the 11-week term. Participants were asked to gather with the facilitators every Monday afternoon from 15h30-17h30. The Monday of week three was a national public holiday; hence the total intervention spanned nine weeks, with eight two-hour contact sessions. All sessions were held in a large classroom on the school premises. The overall participation rate was 89%. Three participants attended all the sessions, six missed one session each, and two missed two sessions each. During week 10 of the third term, I met with the participants to complete the post-test questionnaires, as well as to facilitate the focus group discussion.

3.5 RESEARCH METHODOLOGY

Embedded in the pragmatic paradigm, the research methodology of this case study was guided by a mixed methodology utilising both quantitative and qualitative research methods to measure and explore the participants’ experience of the MBI. The adoption of a mixed methods pre-post test approach, and the different data collection tools utilised will be discussed.

This empirical study was based on a small-scale version of what could be, potentially, a larger-scale study (Teijlingen & Vanora, 2002). An advantage of conducting a small-scale study is that it can inform prospective researchers of any pitfalls that occurred and provide an opportunity to reconsider aspects of the design so that these can be addressed in the full-scale study. Possible amendments to enhance a full-scale study are discussed further in Chapter Five. As mentioned in Chapter One, the quantitative component of the research is based on a One-Group Pretest-Posttest experimental design (Neuman, 2007; Babbie & Mouton, 2006), which represents a component of the overall convergent parallel design. This type of experimental design is considered pre-experimental, in that it does not include a

control group or a comparison group. Participants completed two self-reported feedback questionnaires at two time points — one before the intervention, and the other after the intervention. Given that pre-experimental designs do not account for control or comparison groups, compromising internal validity, the qualitative component of the research study in the form of a focus-group discussion offered the opportunity to triangulate the results (Crano & Brewer, 2008; Creswell & Tashakkori, 2007). Hence, the mixed-methods approach of using quantitative and qualitative data collection techniques acted as a way of gaining insight into the external influences that may have affected the results.

3.5.1 Sample selection

Sampling is the decision-making process of selecting research participants from the larger population (Terre Blanche, Durheim & Painter, 2006). In this case study I aimed to recruit a small group of educational staff members from the broader educational staff member population. In addressing the research question a non-probabilistic purposive sample was used. As stated in Chapter One, the reason for using this sample strategy was because the study focuses on a small sample size ($n=11$), which I had selected purposefully to assist with clarifying and deepening her understanding of the phenomenon of teachers being trained in mindfulness (Neuman, 2007; Bergen & While, 2000). My constraints, both time and financial, did not allow for other forms of probability sampling, such as random sampling. Selection criteria for participants were that they had to be employees of a school, who were full-time class teachers, or staff who had direct contact with the students in an educational or support role. There was no particular restriction or discrimination as to which schools were contacted, as long as the participants were associated with one school campus, were willing to commit to the time allocation of the intervention, were qualified educational staff members, and employed in a full-time capacity by the same school. The reason for ensuring participants of the group were selected from one school was to contain the teaching experiences to one specific educational context, as well as to allow for the possibility of performing the intervention on campus ensuring convenience for participants.

3.5.1.1 School selection

First, a school was recruited to form part of an empirical study. Second, from the pool of staff at the selected school, interested staff volunteered to participate. Selecting a group of interested staff members was largely influenced by the school selection. Hence, the selection of participants was preceded by the school's interest to participate.

I, based on location and familiarity, selected a convenient sample of 21 schools⁹ (four of the 21 schools comprised both primary and high school divisions and each division was contacted separately) that were e-mailed the *Staff Development Opportunity: Mindfulness training for teacher's research project* advertisement (see Appendix A). The advertisement aimed to 'sell' the project to the reader and to recruit a group of willing staff members. The e-mails were primarily addressed to senior management within the school organisation, for example either school principal or deputy principal. To account for contextual and pragmatic issues, all staff members were required to be based at one campus and employed by one school. I continued to advertise the programme until the quota of selecting one school, based on the stipulated requirements, was met.

From the pool of 21 schools that were sent the advertisement, five schools replied positively. One school was able to commit but only in the following academic year of 2017, which did not suit the research requirements. Three school principals, while interested in the opportunity, did not believe that they would be able to recruit 8-12 interested staff members to participate after school hours. This left the last school, (comprised of a primary and a high school), whose principal was both interested in the project and able to recruit 11 staff members to participate.

The school, which remains anonymous for ethical reasons, demonstrated a keen interest in participation and disseminated the advert, both electronically and verbally to all staff members. Moreover, approval was granted from school management to perform the intervention on the school premises, which ensured easy accessibility for staff after school working hours.

3.5.1.2 Participant selection

⁹ Of the total 21 schools contacted, 16 were Primary Schools, of which 8 were government schools and 8 were independent schools. The nine high schools selected included 7 government schools and 2 independent schools.

Eleven staff members responded to the advertisement and willingly volunteered their participation. Six weeks before the intervention was due to commence I held an information session with the participants, which included the following:

- An explanation of the research process and purpose;
- A brief outline of the mindfulness intervention;
- Consent procedures: provided in written form, and verbally discussed;
- Confidentiality procedures;
- Pre-testing questionnaires: Five Facet Mindfulness Questionnaire (FFMQ), Compassion towards Students Scale (CTSS).

Participants completed an informed consent form, and I explained to all participants that their feedback would remain anonymous, and that they had the right to withdraw from the study at any stage of the intervention.

3.5.2 Data collection

Data collection is the process of gathering information to address the research questions. This mixed-methods case study involved several components, which included: sourcing relevant, existing literature, participant selection, consent procedures, collecting data, recording the data, and administering the data collection. Given this is a mixed methods design, the data administration and collection process proceeded along two strands: quantitative and qualitative. The quantitative strand employed questionnaires as a source of data collection, and the qualitative strand documented participants' subjective feedback via a focus group discussion. Each strand formed a substantive part of the data collection process with rigorous quantitative and persuasive qualitative procedures being followed to ensure a thorough effort was made to address the research questions (Creswell & Plano Clark, 2011).

3.5.2.1 Literature review

As part of the literature review, the studies identified, read, and discussed on the research topic formed an integral role in the development of this research study. First, the data collected illustrated

what studies had already been conducted on mindfulness with teachers, both nationally and internationally, how they were conducted, and what the outcomes were. Hence, this study used several elements from previous peer-reviewed studies, and positioned itself within this field of literature. Second, the data provided foundational knowledge on the topic of mindfulness, allowing me to extrapolate key concepts, theories and pertinent issues. Third, the literature review chapter serves a bibliographical function for readers, allowing readers to easily identify pivotal literature on the topic of mindfulness with teachers (Neuman, 2007; Babbie & Mouton, 2006).

3.5.2.2. Questionnaires

As previously noted in Chapter 1, two different questions were used to capture data at the beginning (pre) and again at the end (post) of the mindfulness intervention (Crano & Brewer, 2008). Both the FFMQ and CTSS questionnaires used were Likert type questionnaires, allowing participants to rate the presented statements based on the degree to which they agreed or disagreed with them (Rosenthal & Rosnow, 2008). The choice of self-reported questionnaires was to ensure that each participant received the same standardised questionnaire, and that the answers would be easily quantifiable, so that outcomes could be numerically comparable. Both the FFMQ and the Compassion For Others Questionnaire are in the public domain online and permission was not required for use in this study.

Five Facet Mindfulness Questionnaire

The Five Facet Mindfulness Questionnaire (FFMQ) is a 39-item questionnaire developed to measure situational elements of mindfulness on a 1-5 Likert scale (Baer et al, 2006) (Appendix B). As mentioned in Chapter 2 this questionnaire was devised by extracting key items from five other scales, namely the FMI, MAAS, CAMS-R, SMQ, KIMS. The reliability analysis, based on the five questionnaires, indicated strong inter-correlation results (Baer et al, 2006). Furthermore, findings from Baer et al (2008) provide good support for the construct validity of the FFMQ. The assumption is that the higher the score the more mindful one is. However, some of the items are reverse scored, which impacts how the questionnaire results are calculated and interpreted. The FFMQ full scale is divided into five subscales:

1. **Observe**: observing/noticing/attending to sensations, perceptions, thoughts, feelings;
2. **Describe**: describing, labeling with words;

3. **Act-aware:** acting with awareness, automatic pilot, concentration, non-distraction;
4. **Nonjudge:** nonjudging of experience; and,
5. **Non-react:** non-reactivity to inner experience.

Table 1: Example Items for Mindfulness Facets

FACET	EXAMPLE ITEM
Observing	I notice the smells and aromas of things.
Describing	I am good at finding words to describe my feelings.
Acting with awareness	I find myself doing things without paying attention. (R)
Nonjudging of inner experience	I think some of my emotions are bad or inappropriate and I should not feel them. (R)
Nonreactivity to inner experience	I perceive my feelings and emotions without having to react to them.
NOTE: R = reverse-scored item (higher scores represent higher levels of mindfulness)	

Adapted from Baer et al (2008, p. 330)

Compassion Towards Students Scale (CTSS)

The 24-item Compassion Towards Others Scale (Pommier, 2011) was modified using the word 'student' instead of 'others' (Appendix C). This was to emphasise compassion towards others in the educational environment, given that the group of participants were staff members interacting with students.

The Compassion Towards Others Scale is based on Neff's (2003a) six-factor structure of compassion (kindness vs. indifference, common humanity vs. separation, and mindfulness vs. disengagement) that was developed in the original Self-Compassion Scale. Pommier (2011) established content validity for the original Compassion Towards Others Scale with results suggesting that the scale is a psychometrically sound measure of compassion. While the six factors are included as separate sub-scales, three of the sub-scales represent the opposite of the other three subscales. The three scales and their corresponding antithesis scales are described below.

Scale1

- a) **Kindness:** an understanding towards others in instances of failure or suffering.
- b) **Indifference:** being critical or indifferent to others in instances of failure or suffering.

Scale 2

- a) **Common Humanity:** to see other's suffering and pain as part of the human experience.
- b) **Separateness:** to see other's suffering and pain as part of a separate event.

Scale 3

- a) **Mindfulness:** holding painful thoughts and feelings in a balanced way.
- b) **Disengagement:** over-identifying with the suffering, or denying it.

Table 2: Example Items for Compassion Scale

FACET	EXAMPLE ITEM
Kindness	If I see a student going through a difficult time, I try to be caring toward that person.
Indifference (all items for this subscale are reverse scored)	Sometimes when students talk about their problems, I feel like I don't care. (R)
Common Humanity	Everyone feels down sometimes, it is part of being human.
Separation (all items for this subscale are reverse scored)	I feel detached from students when they tell me their tales of woe. (R)
Mindfulness	I pay careful attention when other students talk to me.
Disengagement (all items for this subscale are reverse scored)	I can't really connect with other students when they're suffering. (R)
NOTE: R = reverse-scored item (higher scores represent higher levels of mindfulness)	

Adapted from Pommier (2011)

As for the FFMQ, the assumption is that the higher the score the more compassion towards students one demonstrates. The scoring for the three negative subscales i.e. Indifference, Separation and Disengagement are reverse scored. This impacts how the questionnaire results are calculated and interpreted.

3.5.2.3 Focus Group Discussion

The focus group was a reflective discussion of the experience of being part of the mindfulness intervention (Rosenthal & Rosow, 2008). Its aim was to solicit the testimony of the participants as a way of thickening the research dataset, as well as to reflect on the quantitative pre-post-testing

process. Of the 11 participants, 10 were able to attend the focus group discussion. I provided a certain degree of structure to the conversation by preparing a set of 10 open-ended questions (Appendix D). The chairs in the room were arranged to form a semi-circle, with myself facing the group. The I managed the focus group discussion by going around the semi-circle ensuring that everyone had the opportunity to offer comment on every question asked. In this way I was also able to collect “individual” responses. With the permission of the participants, the discussion was audio recorded.

3.6 DATA ANALYSIS

The data analysis process was performed in response to the research questions. Quantitative and qualitative datasets were first analysed separately in chapter 4 and later integrated for discussion in Chapter 5 (Creswell & Tashakkori, 2007; Creswell & Plano Clark, 2011). The quantitative analysis aimed to investigate whether there was a significant change in self-reported levels of mindfulness and, or, compassion towards students. The qualitative analysis aimed to gain insight into the participants’ experience of mainly 1) the intervention, but also 2) the pre-and-post process of completing the two self-reported questionnaires, as well as 3) the effect of being part of a research study. Furthermore, it explored whether, and if so how, the latter two points may have influenced their experience of the intervention.

3.6.1 Questionnaire data analysis

As noted in Chapter 1, the pre-and-post datasets for The Five Facet Mindfulness questionnaire and the Compassion Towards Students questionnaire were statistically analysed. The raw data was arranged in a form useful for data analysis. In this research study, each participant’s pre-and-post quantitative data was collated into an excel spreadsheet for the FFMQ and the Compassion Towards Students Scale (CTSS). The reversal scores for the indicated items in both scales were recalculated.

A statistician provided technical assistance in processing and analysing the results, using the Statistica 13 software package. A reliability analysis was first conducted by calculating *Cronbach alpha* to determine the inter-correlation between items, both with each subscale as well as between the subscales of the total questionnaire items. A mixed model repeated measures ANOVA was used to test for possible differences in pre-and-post mean scores (Rosenthal & Rosnow, 2008). A mixed

model contains both fixed effect and random effect. Time (pre and post) was treated as fixed effect and the participants as random effect. Summary results were reported as means and standard deviations. A 5% significance level ($p < 0.05$) was used as a guideline for detecting significant differences. Tables and graphs were produced based on the results to organise and to visually represent the data.

3.6.2 Focus-group transcript analysis

The qualitative data collected from the focus group discussion was audio recorded and then transcribed with permission of the participants. I read through the transcript data several times, and developed a colour-coded logbook, whereby data was coded according to categories and then themes (Saldana, 2009; Neuman, 2007).

A code is understood to be a word or short phrase that is “summative, salient, and essence-capturing” for a portion of the transcribed content (Saldana, 2009, p. 3). While coding requires some degree of rigour and consistency, it is not a precise science, and therefore is based primarily on interpretation, and therefore largely subjective in nature. While the term coding is used to describe the process of summarising and simplifying the data, coding is understood to be a transitional process between data collection and data analysis. In this way the transcript is read and reflected on, and the meaning of the content is *decoded* to assign an appropriate code, hence it is *encoded*. From the individual codes, I aimed to identify repetitive patterns in *what* and *how* the participants responded, hence coding is a linking process.

Descriptive Coding was used to document and categorise the individual answers stated by the 10 participants. Coding is an exploratory, problem-solving technique that is cyclical. Each time I was able to read, reflect and recode the data she was able to further manage, filter, and focus the salient features to generate categories, themes and concepts (Saldana, 2009). In this way, the data needed to be coded, and sometimes recoded several times, refining the process of analysis and linking codes together, in a systematic manner. Codes that are clustered together based on similarities, form patterns, and ultimately facilitate the development of categories, and possibly sub-categories. Ultimately, a hierarchical ‘coding schema’ is constructed and the codes are grouped into sub-categories and categories (Saldana, 2009). From the categories themes and concepts emerge. Themes can be envisaged as the outcomes of the coding process, and tend to be subtle and possibly

more phrase like in their description. The themes that emerged from the focus group discussion are analysed and discussed in more detail in Chapter Four.

3.7 VERIFICATION OF THE DATA STRANDS

Validity serves the purpose of checking the quality of data, the results, and the interpretation (Creswell & Plano Clark, 2011). This research study used a set of strategies to unpack whether there may be any potential issues compromising the way in which the data was collected, analysed, or interpreted. Reliability refers to the consistency with which a measure, such as the two questionnaires employed in this study, measures what they aim to measure i.e. mindfulness and compassion (Foxcroft & Roodt, 2013). Given that this is a mixed-methods case study, the validity and reliability of the data are assessed from both quantitative and qualitative perspectives. While some of the verification strategies overlap and, or, work together through triangulation, other times they require distinctly different verification strategies.

3.7.1 Verification of the quantitative strand

3.7.1.1 *Selection of questionnaires*

The purpose of this study was to explore the components of mindfulness and compassion and not to develop the respective questionnaires. However, I did want to select credible questionnaires to measure pre-and-post levels of mindfulness and compassion, and therefore the following validity investigation was conducted on the selected instruments.

The FFMQ and the CTOS have both endured content and construct validity assessments over the years. I selected the FFMQ and the Compassion Towards Others Scale based on the credibility of previously peer-reviewed studies and validity tests (Frank et al, 2015; Beshai et al, 2015; Roeser et al, 2013; Flook et al, 2013; Jennings et al, 2013; Jennings et al, 2011; Pommier, 2011; Baer et al, 2008; Baer et al, 2006; Neff, 2003b). It has been established that the FFMQ has good construct validity for the use of multiple facets of mindfulness (Baer et al, 2008). The Self Compassion Towards Other's is based on the established and psychometrically valid Self-Compassion Scale (Neff, 2003b). As for the Compassion Towards Others Scale, it is a newly developed scale, and the full validity report on the

Compassion Towards Others Scale is only due to be published in 2017 (personal communication, K. Neff, 19 April 2016). Based on Pommier's (2011) first study and provisional report, the following results on the validity of the questionnaire were deduced. After several validity tests, it appeared that the Compassion Towards Others Scale generally functioned as predicted. This included having moderate-to-significant associations with similar constructs such as compassionate love, social connectedness, wisdom, empathy, and perspective taking. However, the predicted association of compassion with mindfulness was not confirmed. This may be due to the mindfulness measure that was used (Southampton Mindfulness Scale). The content validity of the scale was partially established through the Compassion Towards Others Scale being examined by experts.

3.7.1.2 Reliability of the sample results

Questionnaire results were double checked and validated by myself, my supervisor and a statistician. Based on the small sample of participants recruited in this research study, a reliability analysis of the scores was conducted by calculating Cronbach alpha to determine the inter-correlation between items. Reliability coefficients of 0.70 are deemed adequate for research instruments (Tredoux & Durrheim, 2002). The results are discussed in Chapter Four.

3.7.1.3 Research design validity

Internal validity is the extent to which we can be certain that the effect measured is in fact due to the intervention (Foxcroft & Roodt, 2013). The absence of a control group in this study represents a high risk to the internal validity of the findings. This risk has been mitigated, in part, by the use of a post-intervention focus group, which adds credibility to the study through the recognised experiences that are interpreted by the researcher. As previously noted, the focus group provides an opportunity to enhance the internal validity of the quantitative strand, and as such it forms part of a triangulation process. Triangulation in this study sought the convergence, corroboration, and correspondence of results from different methods. Hence, the qualitative data set was used to reconcile the quantitative data set (Creswell & Planto Clark, 2011; Quinn Patton, 1999). The focus group provided an opportunity for participants to share their experience, and for me to interpret these experiences.

3.8.1.4 Pre-test sensitisation

Another relevant threat to the internal validity of the findings is pre-test sensitisation. This is partially mitigated by the timing between the pre-test and post-test questionnaires, which is 15 weeks. Even though significant events may have occurred in the lives of participants during the course of the study that may have influenced the findings, the focus group provided participants with the opportunity to discuss the impact of these events in relation to the effects of the intervention. Dropout of participants during the intervention initially posed a threat to validity, however all 11 participants who signed-up for the intervention completed the intervention (Babbie & Mouton, 2006).

3.7.1.5 Factors affecting reliability

All eleven participants completed both the FFMQ and CTSS questionnaires before and after the intervention, without omitting any questions. However, there may have been factors that affected the reliability in how they answered the self-reported measure questionnaires, as well as how they responded in the focus group discussion.

Response bias could have occurred with participants answering in a fixed or systematic manner, or purposefully presenting skewed responses (Foxcroft & Roodt, 2013; Babbie & Mouton, 2006). From closer inspection of the results, and from the interaction I had with participants, this did not seem to be the case. There was a strong emphasis on respect and honesty throughout the programme, and it appeared as if this theme resonated with respondents and that they approached the questionnaires with the intention of completing them honestly and completely. Possible ways in which participants may have misrepresented or biased their answers are noted below (Foxcroft & Roodt, 2013):

- **Centrality or extremity bias:** When a person decides to answer neutrally or tends to answer in extremes. Given the format of the 1-5 option of the Likert Scales this may have occurred as there were extreme score options (score 1, 5) and a point of centrality (score 3).
- **Social desirability:** Participants may have believed that there were more 'correct' answers than others, and hence wanted to represent themselves to me in the most positive way. I did emphasise that there was no 'correct' or 'incorrect' answer, and the best way to answer was authentically. Confidentiality was also highlighted, so as to reinforce that no one other than the research team would see the results, and the school would not have access to the individual results. Social desirability was also raised in the focus-group discussion.
- **Purposeful falsification:** Participants may have wanted to purposefully falsify their

answers and therefore deliberately have chosen options that were not authentic responses. This may be because they wanted to influence the research study outcomes either positively or negatively.

- **Unconscious falsification:** There may well have been cases of unconscious falsification, where participants may have misinterpreted or misunderstood the questions and therefore misrepresented their answers. Participants were allowed to ask for clarification or indicate if an answer was unclear, no participant requested clarification, indicating to me that they all understood the questions.
- **Variability in individual scores:** Given the subjective nature of self-reported questionnaires, there may have been variation in the interpretation of questions, and more so in the scoring. For example a score of 2 may mean one thing to one participant and another thing to another participant.

I was generally comfortable with the way in which participants answered the questionnaires and the focus group questions, and there was no reason to believe there was any deliberate falsification or intentional misrepresentation. However, what was cause for concern was that since the questionnaires are self-reported measures, there might well be variability in participant scores since the natural variation in subjective interpretation of questions and scoring would have influenced the way the questionnaires were completed.

3.7.2 Verification of the qualitative strand

The trustworthiness of the research was grounded on the principles of credibility, transferability, dependability, and confirmability (Creswell & Plano Clark, 2011; Thomas & Magilvy, 2011). These four components to the research study are discussed.

3.8.2.1 Credibility

Credibility is the component that allows others to recognise the experiences contained within the study through the interpretation of participants' experiences (Thomas & Magilvy, 2011). In this way it

acknowledges that reality is subjective and influenced by the perspectives of the participants. Credibility is the connection between the way the researcher interprets and presents the data from the transcripts and the actual meanings of the participants' experiences. Credibility is demonstrated through three verification strategies: 1) participant triangulation (participants' answers were compared so that I could identify themes of similarities and differences), 2) an audit trail (demonstrating the step-by-step process of data collection and analysis), and 3) reflexivity (the impact I may have had on the research process) (Creswell & Plano Clark, 2011).

3.7.2.2 *Transferability*

Transferability is relevant to the external validity of the study, as it describes the extent to which the findings can be generalised to the broader population (Thomas & Magilvy, 2011). The specific requirements that participants needed to be staff members who have contact with students in an educational or support role, represents the population to which this study may be compared to. The outline of the school context (Appendix J) further provides insight into the type of school environment the staff members were part of, reinforcing the possible contextual constraints, which may have influenced this study.

3.7.2.3 *Dependability*

Dependability allows the opportunity for another researcher to follow the decision trail used by the researcher of this study (Thomas & Magilvy, 2011). An audit trail, as demonstrated in Chapter 3 and Chapter 4, specifically addresses the dependability of the study by unpacking my rationale, process, and data analysis. Hence the step-by-step documentation of how the research process unfolded, promotes confidence in how the research findings came about. Furthermore, having a supervisor and statistician check and screen the study process and results, forms an additional check-system.

3.7.2.4 *Confirmability*

Confirmability is similar to objectivity in strictly quantitative research, and it is created through credibility, transferability and dependability (Thomas & Magilvy, 2011). The qualitative strand of the focus group discussion relied on me to facilitate the conversation, and to interpret the results, which is

by nature a subjective process and therefore necessary for me to understand my inclinations and influences on the research process. I chose not to participate in the intervention, so as not to inhibit or impose my influence on the participants through 'the watchful eye of an observer'. Rather I played only the role of researcher, strictly interacting with participants before and after the intervention.

3.8 ETHICAL CONSIDERATIONS

This research study recruited 11 staff members involved with students in a full-time educational or support role. While it was open to all public or private mainstream primary or high school teachers, due to time constraints, and the restricted advertising channel only 21 schools were contacted. After the selected school demonstrated a keen interest in the research study, a purposive sample group of eleven participants volunteered to pursue the mindfulness intervention. The ethical implications of involving these participants are discussed below.

3.8.1 Facilitator agreement

Prior to the commencement of the intervention, the facilitator was briefed by myself and asked to sign a *facilitator's agreement* (Appendix E) regarding ethical practices to be observed during the research. The following issues were discussed with the facilitator:

- To respect the *autonomy* of all participants by recognising his/her freedom to withdraw from the programme at any stage.
- To maintain *confidentiality* and to respect the privacy of all participants.
- To work in *collaboration* with myself, the researcher, specifically with regards to the effective management of course logistics and participation, such as planning for dates and times of sessions, and to ensure punctual attendance at all agreed sessions.
- To provide the best possible *service* to participants, in line with her qualification, with the aim of increasing their knowledge and awareness of mindfulness practices as these relate to professional employment as educational staff.
- To *avoid harm* to participants at all stages of the programme.
- To keep a referral list available at each session of psycho-social *support* providers, and to be able to provide the relevant details to a participant should she/he require further support

from a provider.

3.8.2 Participant consent and autonomy

The participants each received a *participant informed consent* form (Appendix F), outlining the requirements of participation, what the study entailed, costs of participation such as time commitments, and the benefits that may arise such as increased self-awareness and stress management techniques. This informed consent form highlighted to participants that while their intention ought to be to complete the eight sessions of the study, since informed consent is regarded as a process, they had the right to withdraw from the study at any point (Horn et al, 2015). The participant informed consent form was presented verbally and distributed in written format, and participants had the opportunity to ask questions. When the participant was comfortable with the programme process and fully understood his/her role, each participant was asked to sign the form. This reinforced the ethical principle of *autonomy*, which ensures participants have the freedom to make their own choices (Allan, 2011).

Participants also received a *participant information sheet* (Appendix G) that they could take home with them. The information sheet contained exactly the same information as the informed consent form; however, it also included a list of both public and private mental health care service providers. These service providers were available to participants should the need have arisen for additional support.

3.8.3 Confidentiality and document storage

Participant and school names remained anonymous. Participants were coded numerically and the school was referred to as 'the school'. This anonymity coincides with the principle of confidentiality (Allan, 2011). The personal reflections and experiences that may have arisen during group discussions over the course of the intervention remained confidential and were not shared with me as these were not to be reflected in this research; only the data recorded from the focus group discussion was used for qualitative purposes to reflect on the overall programme experience. Names were provided on the questionnaire forms, to ensure that the pre-and post-test scores corresponded to the same person. However, this was the only purpose for the names, as once the data was inputted into the statistical programme, the names became numbers. All questionnaires and focus group feedback

documentation is securely stored for a period of five years and only I and my supervisor have access to the data. Raw data collected is stored in a safe. Any data loaded electronically onto a computer is protected through the use of a security code. It is my the responsibility to control data access.

3.8.4 Risk implications

This programme poses minimal risk to participants. The facilitator conducting the intervention is a trained mindfulness practitioner. In 2015 she received certification through the Mindfulness Institute of South Africa, in collaboration with Stellenbosch University Faculty of Medicine and Health Sciences. Participants were not required to physically perform any actions they were uncomfortable with. They were required to be guided through the programme with the expertise of the trained mindfulness facilitator.

This research proposal was reviewed and accepted by the Research Ethics Committee of Human Research (Humanities) of Stellenbosch University. This was to ensure that ethical principles were adhered to and research practices were aligned to human research ethic procedures (see Appendix K for ethics approval).

3.9 CONCLUSION

This chapter has described the pragmatic paradigm within which the research question is nested. The research methodology and design were mapped out, demonstrating how the primary and secondary, research questions were addressed. The data collection methods were explained and the data analysis process described. Issues related to the validity and reliability of the quantitative data, as well as credibility, dependability, transferability, and confirmability were unpacked, and finally ethical considerations pertaining to this study were discussed. Chapter 4 reveals the results that transpired from the data collection process and these are analysed and discussed in further detail.

CHAPTER 4

RESEARCH FINDINGS AND ANALYSIS

4.1 INTRODUCTION

The primary purpose of this study, as described in Chapters 1 and 3, is to explore the role a mindfulness-based intervention (MBI) programme could play in supporting teachers' classroom practices. In relation to the primary aim of the research, two secondary questions were developed to specifically investigate the following:

- How effective is the programme at changing self-reported, quantitative levels of mindfulness and compassion in the classroom?
- What were the participants' subjective experiences of the MBI programme?

An exposition of the research findings is provided in this chapter in an attempt to answer these research questions. As explained in Chapter 3, a mixed-methods approach was adopted, and therefore both quantitative and qualitative data results are presented and analysed independently, and then finally discussed together in Chapter 5. In brief, the aim of the quantitative data set was to determine whether there were any significant results from the statistical analysis conducted on the participants' pre-and-post questionnaire (FFMQ and CTSS) responses. The aim of the qualitative data was to triangulate the results, gain insight into potential external influences affecting the results, and to develop a deeper understanding from the teachers of the process of acquiring mindfulness skills.

4.2 RESEARCH FINDINGS ON SELF-REPORTED, QUANTITATIVE LEVELS OF MINDFULNESS AND COMPASSION IN THE CLASSROOM

The quantitative results are drawn from a purposive sample of 11 teachers, employed by one school. All 11 participants completed both the Five Facet Mindfulness Questionnaire (FFMQ) as well as the

Compassion Towards Students Scale (CTSS) before the course started, and again after completion of the course. Two analyses were conducted: first a reliability analysis to ascertain the reliability of the questionnaires used; and, second, a mixed model repeated measures ANOVA was completed on both questionnaire outcome results as well as their respective subscales. The results are reported below.

4.2.1 Reliability analysis

An item reliability analysis was conducted by calculating Cronbach alpha to determine the inter-correlation between items. High internal consistency within the subscales and total scale leads to strong test-retest reliability. Reliability coefficients of 0.70 are deemed adequate for research instruments (Tredoux & Durrheim, 2002).

4.2.1.1 Reliability Analysis: Compassion Towards Students Scale (CTSS)

The following reliability results were deduced for each of the subscales of the Full Scale as well as the Full Scale (see Appendix L: Tables 4.1 to 4.7). Three of the six scales resulted in relatively low reliability coefficients; these were *Disengagement* (0.61); *Mindfulness* (0.32); and *Common Humanity* (0.43) (see Tables 4.1, 4.4, and 4.6 respectively). While the items have a fairly high degree of face validity, the reliabilities for these three subscales should to be interpreted with caution. Particular items with weaker item total correlations were for *Disengagement* item 7 (0.17), for *Mindfulness* item 21 (0.03) and 9 (0.13), and for *Common Humanity* items 17 (0.08) and 20 (0.08). Three of the subscales' reliability coefficients measured highly; these were *Indifference* (0.81), *Separation* (0.86), and *Kindness* (0.73) (see Tables 4.2, 4.3, and 4.5 respectively). A Cronbach's alpha of 0.86 was obtained for the reliability of all six subscales representing the total *Compassion Scale* (see Table 4.7).

4.2.1.2 Reliability Analysis: Five Facet Mindfulness Questionnaire (FFMQ)

The following reliability results were deduced for each of the subscales of the Full Scale as well as the Full Scale (see Tables 4.8 to 4.13). The FFMQ reliability analysis demonstrated that four of the subscales achieved Cronbach alphas above 0.7, namely *Describe* (0.82), *Nonjudge* (0.93) *Nonreact* (0.78), *Act with Awareness* (0.94) (see Appendix L containing Tables 4.9, 4.10, and 4.11, respectively). However, the reliability was borderline for the *Observe* scale (0.67) and thus this

subscale may need to be interpreted with caution (Appendix L Table 4.8). Particular items that demonstrated unusual inter-correlations within their subscales included item 31 (*Observe Scale*) and item 22 (*Describe Scale*), as they indicated close to zero correlations (see Tables 4.8 and 4.9 respectively). The FFMQ full-scale reliability analysis demonstrated a Cronbach alpha of 0.61. The lower reliability score here may have been influenced by the *Describe* subscale item total correlation (-0.10).

4.2.2 Results analysis

4.2.2.1 Compassion Towards Students Scale (CTSS)

A mixed model repeated measures ANOVA was used to compare mean scores of the pre-post tests with participants. Scores were rounded off to two decimal places. At the 5% significance level the *Compassion Scale* result ($F(1,10)=0.01$, $p=0.91$) yielded the null hypothesis correct, suggesting that the intervention did not significantly impact levels of compassion towards students. Furthermore, all six subscales of the Compassion Scale indicated insignificant results (*Disengagement*, $F(1,10)=0.40$, $p=0.54227$; *Indifference*, $F(1,10)=0.21$, $p=0.89$); *Separation*, $F(1,10)=0.08$, $p=0.78$; *Mindfulness*, $F(1,10)=0.57$, $p=0.47$; *Kindness*, $F(1,10)=0.00$, $p=1.00$), *Common Humanity*, $F(1,10)=0.40$, $p=0.54$). Each subscale is reported on below.

4.2.2.1.1 CTSS (Disengagement)

Table 3 reports a mean pre-test score of 4.43 and a mean post-test score of 4.34. The standard deviation for the pre-test scores was 0.55 and for the post-test scores it was 0.58. Figure 3 depicts the descriptive statistics results by illustrating a slight decrease in average scores between the time of pre and post testing.

Table 3: CTSS Disengagement Descriptive Statistics

Effect	Descriptive Statistics (Spreadsheet in PRE-TEST&POST-TEST SCORES_JUNE&SEPT2016.stv)			
	Level of Factor	N	compassion(Disengagement) Mean	compassion(Disengagement) Std.Dev.
Total		22	4.39	0.55
time	PRE-TEST	11	4.43	0.58
time	POST-TEST	11	4.34	0.55

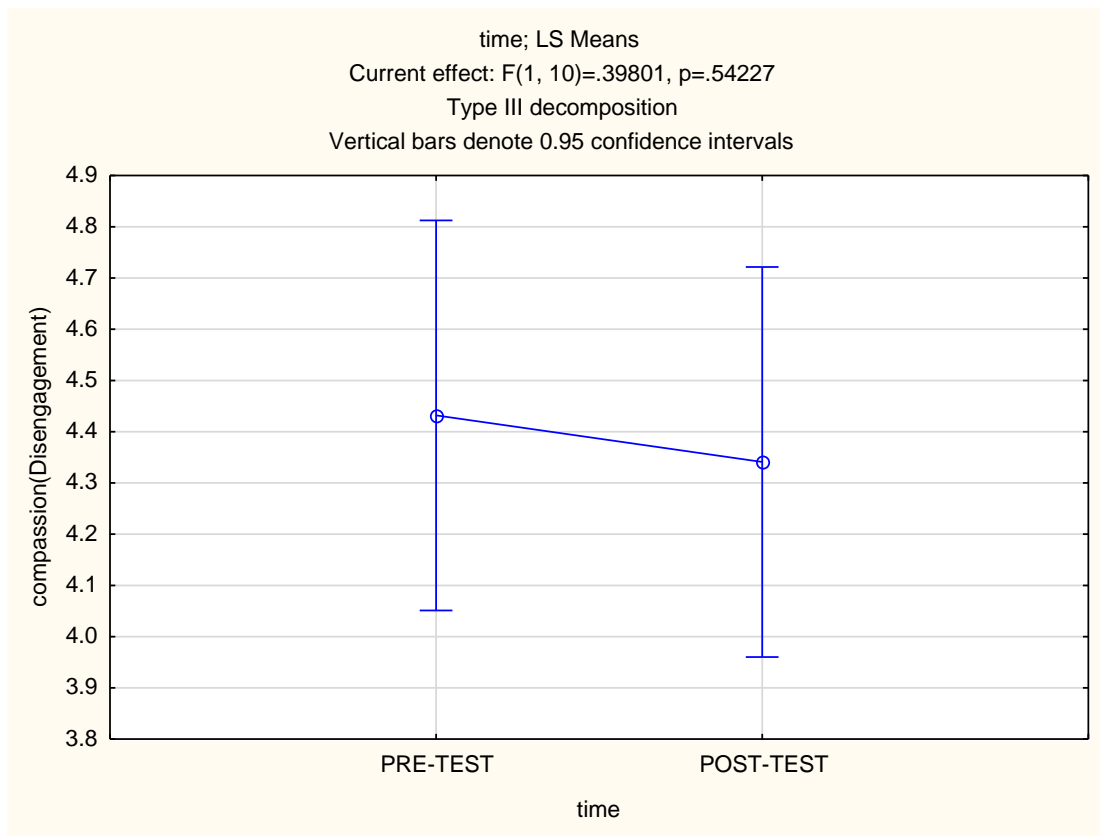


Figure 3: Disengagement Pre-Post Test difference between the group mean scores

4.2.2.1.2 CTSS (Indifference)

Table 4 reports a mean pre-test score of 4.27 and a mean post-test score of 4.30. The standard deviation for the pre-test was 0.58, while there appeared to be higher standard deviation of 0.80 among participants for the post-test scores. Figure 4 depicts the descriptive statistic results by illustrating a very slight increase in average scores between the time of pre and post testing.

Table 4: CTSS Indifference Descriptive Statistics

Effect	Descriptive Statistics (Spreadsheet in PRE-TEST&POST-TEST SCORES_JUNE&SEPT2016)			
	Level of Factor	N	compassion(Indifference) Mean	compassion(Indifference) Std.Dev.
Total		22	4.28	0.68
time	PRE-TEST	11	4.27	0.58
time	POST-TEST	11	4.30	0.80

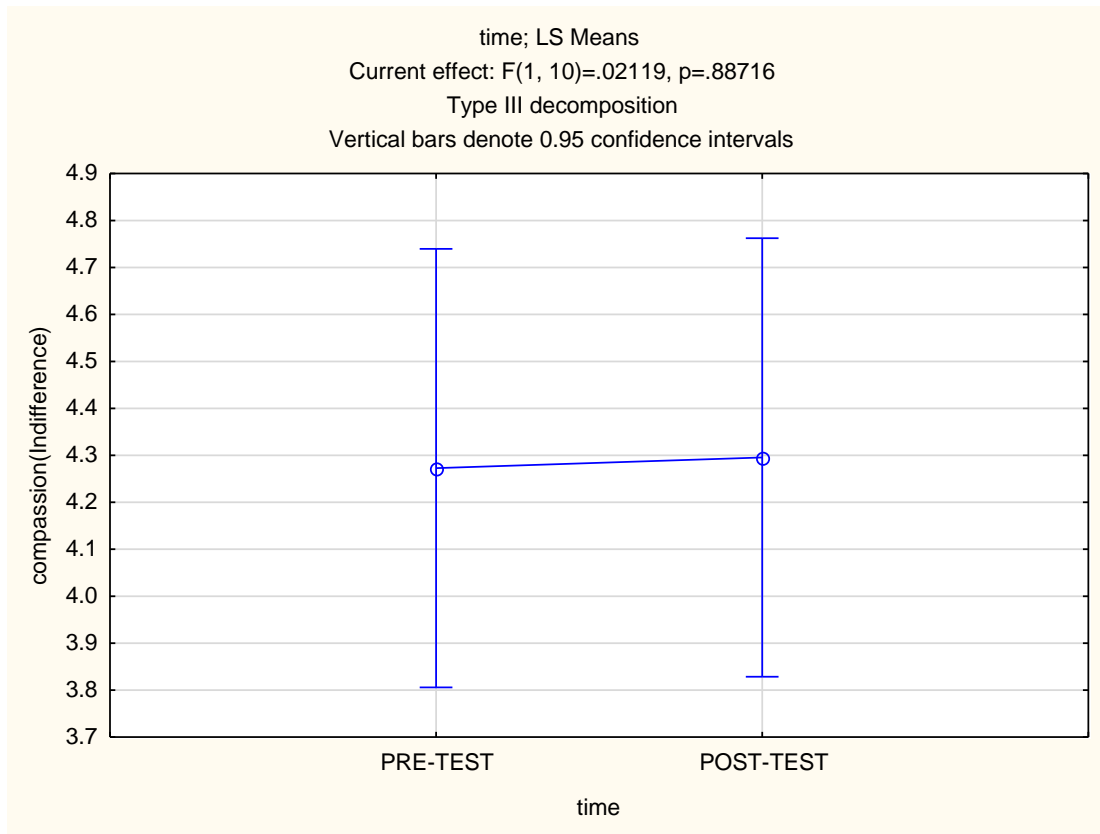


Figure 4: CTSS Indifference, Pre-Post Test difference between the group mean scores

4.2.2.1.3 CTSS (Separation)

Table 5 reports a mean pre-test score of 4.34 and a mean post-test score of 4.39. The standard deviation for the pre-test was 0.70 and post-test standard deviation scores were 0.82. Figure 5 depicts the descriptive statistics results by illustrating a slight increase in average scores between the time of pre and post testing.

Table 5: CTSS Separation Descriptive Statistics

Descriptive Statistics (Spreadsheet in PRE-TEST&POST-TEST SCORES_JUNE&SEPT 2016)				
Effect	Level of Factor	N	compassion(Separation) Mean	compassion(Separation) Std.Dev.
Total		22	4.36	0.74
time	PRE-TEST	11	4.34	0.70
time	POST-TEST	11	4.39	0.82

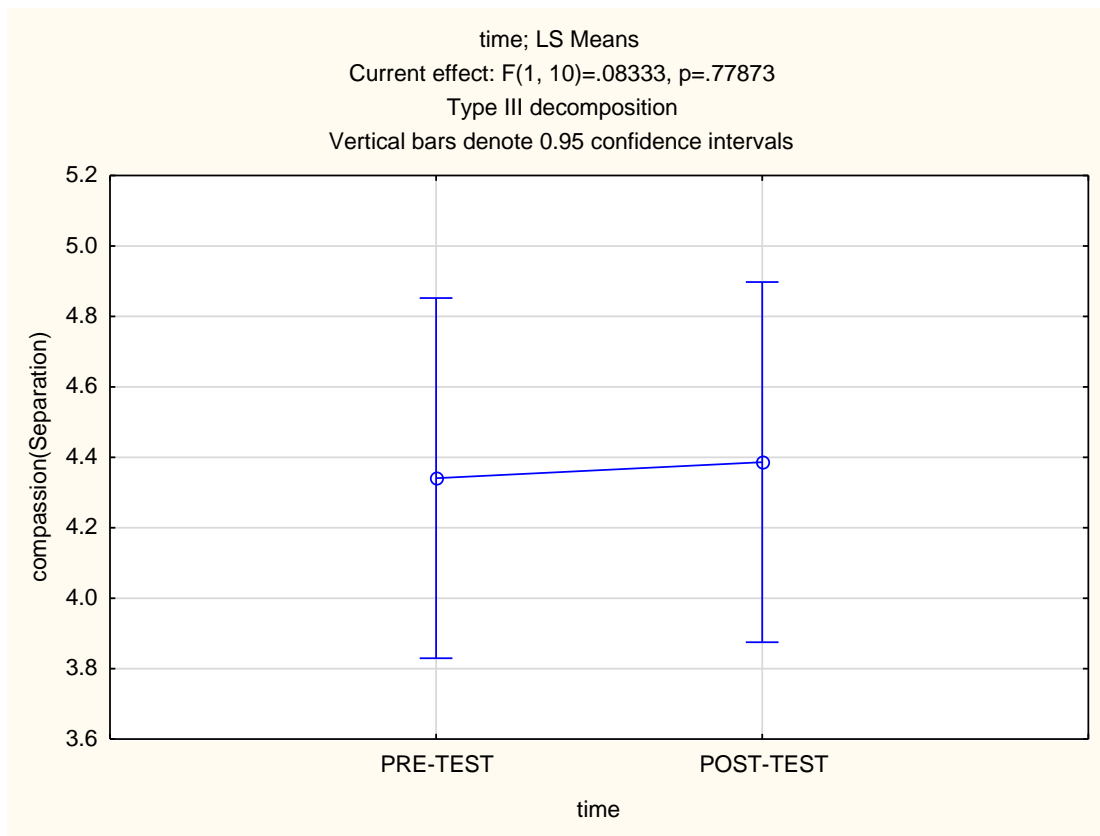


Figure 5: CTSS Separation, Pre-Post Test difference between the group mean scores

4.2.2.1.4 CTSS (Mindfulness)

Table 6 reports a mean pre-test score of 3.82 and a mean post-test score of 4.00. The standard deviation for the pre-test was 0.53 and for the post-test scores it was 0.63. Figure 6 depicts the descriptive statistics results by illustrating an increase in average scores between the time of pre and post testing.

Table 6: CTSS Mindfulness Descriptive Statistics

Descriptive Statistics (Spreadsheet in PRE-TEST&POST-TEST SCORES_JUNE&SEPT2016)				
Effect	Level of Factor	N	compassion(Mindfulness) Mean	compassion(Mindfulness) Std.Dev.
Total		22	3.91	0.58
time	PRE-TEST	11	3.82	0.53
time	POST-TEST	11	4.00	0.63

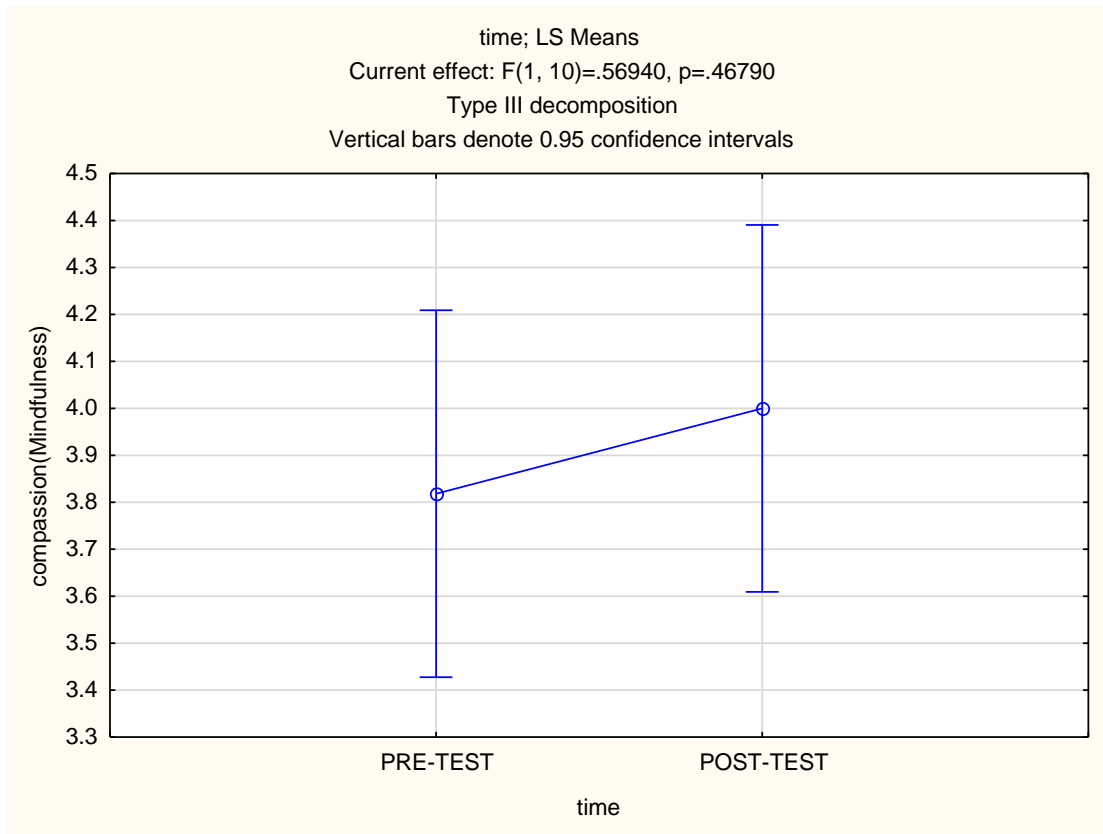


Figure 6: CTSS Mindfulness, Pre-Post Test difference between the group mean scores

4.2.2.1.5 CTSS (Kindness)

Table 7 reports the mean pre-test and post-test scores to both 4.45. The standard deviation for the pre-test was 0.64 and for the post-test scores it was 0.57. Figure 7 depicts the descriptive statistic results by illustrating no difference in the average scores between the time of pre and post testing.

Table 7: CTSS Kindness Descriptive Statistics

Effect	Descriptive Statistics (Spreadsheet in PRE-TEST&POST-TEST SCORES_JUNE&SEPT 20				
	Level of Factor	N	compassion(Kindness) Mean	compassion(Kindness) Std.Dev.	
Total		22	4.45	0.59	
time	PRE-TEST	11	4.45	0.64	
time	POST-TEST	11	4.45	0.57	

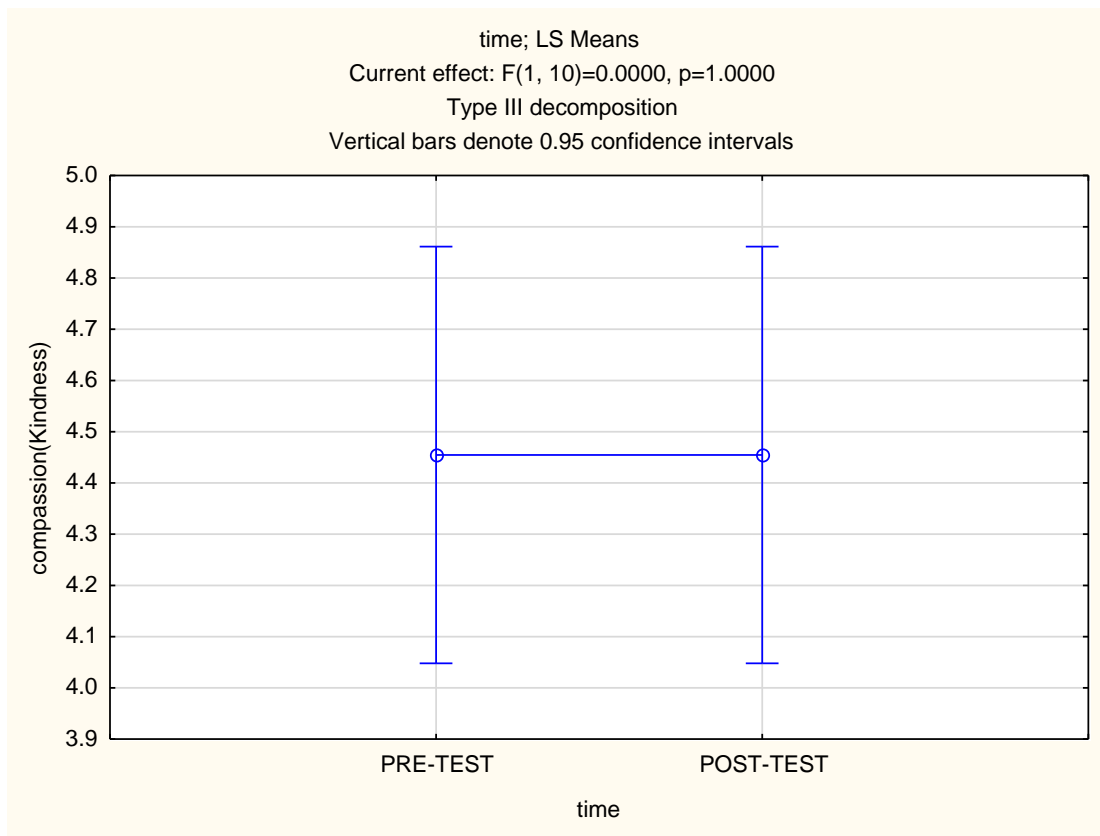


Figure 7: CTSS Kindness, Pre-Post Test difference between the group mean scores

4.2.2.1.6 CTSS (Common Humanity)

Table 8 reports a mean pre-test score of 4.25 and a mean post-test score of 4.16. The standard deviation for the pre-test was 0.40 and for the post-test scores it was 0.58. Figure 8 depicts the descriptive statistic results by illustrating a decrease in average scores between the time of pre and post testing.

Table 8: CTSS Common Humanity Descriptive Statistics

Descriptive Statistics (Spreadsheet in PRE-TEST&POST-TEST SCORES_JUNE&SEPT2)					
Effect	Level of Factor	N	compassion(Common Humanity) Mean	compassion(Common Humanity) Std.Dev.	
Total		22	4.20	0.49	
time	PRE-TEST	11	4.25	0.40	
time	POST-TEST	11	4.16	0.58	

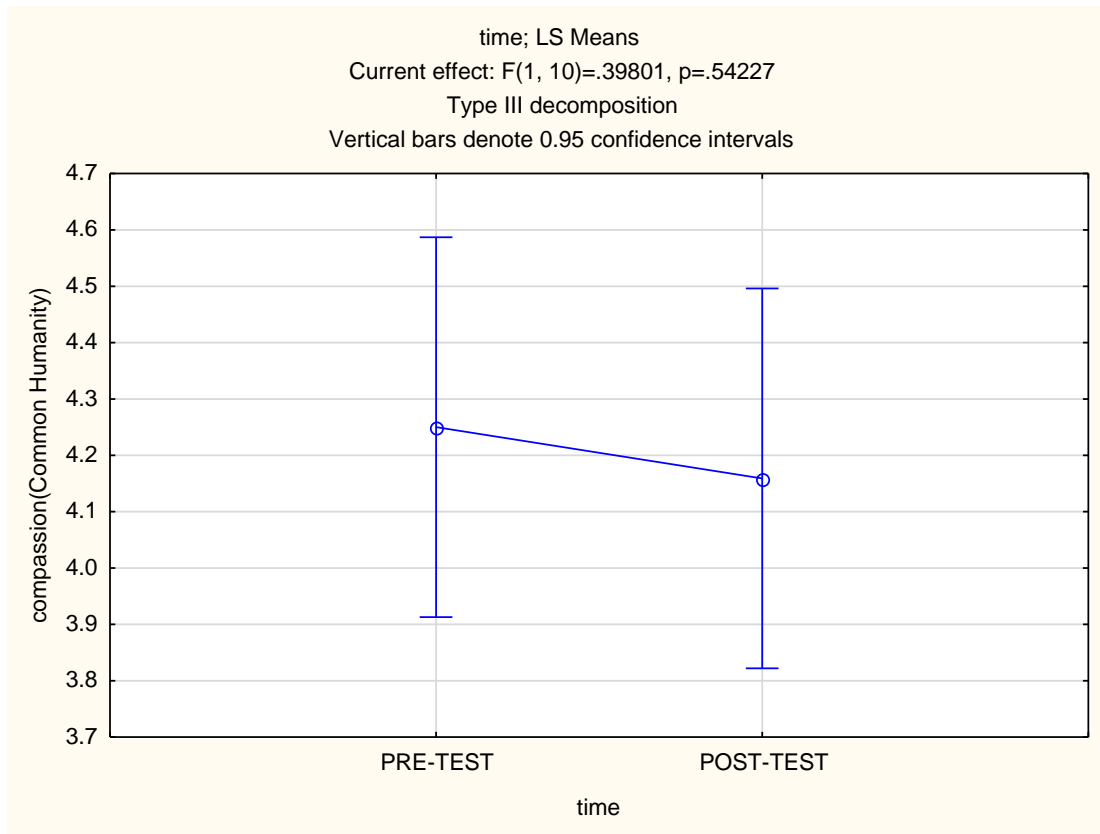


Figure 8: CTSS Common Humanity, Pre-Post Test difference between the group mean scores

4.2.2.1.7 CTSS Full Scale

Table 9 reports a mean pre-test score of 4.26 and a mean post-test score of 4.27. The standard deviation for the pre-test was 0.42 and for the post-test scores it was 0.54. Figure 9 depicts the descriptive statistic results by illustrating a very slight increase in average scores between the time of pre and post testing.

Table 9: CTSS Full Scale Descriptive Statistics

Effect	Descriptive Statistics (Spreadsheet in PRE-TEST & POST-TEST SCORES_JUNE & SEPT 2016.stw)						
	Level of Factor	N	compassion Mean	compassion Std.Dev.	compassion Std.Err	compassion -95.00%	compassion +95.00%
Total		22	4.26704	0.47152	0.10052	4.05798	4.47610
time	PRE-TEST	11	4.26136	0.41670	0.12564	3.98141	4.54131
time	POST-TEST	11	4.27272	0.54146	0.16325	3.90896	4.63648

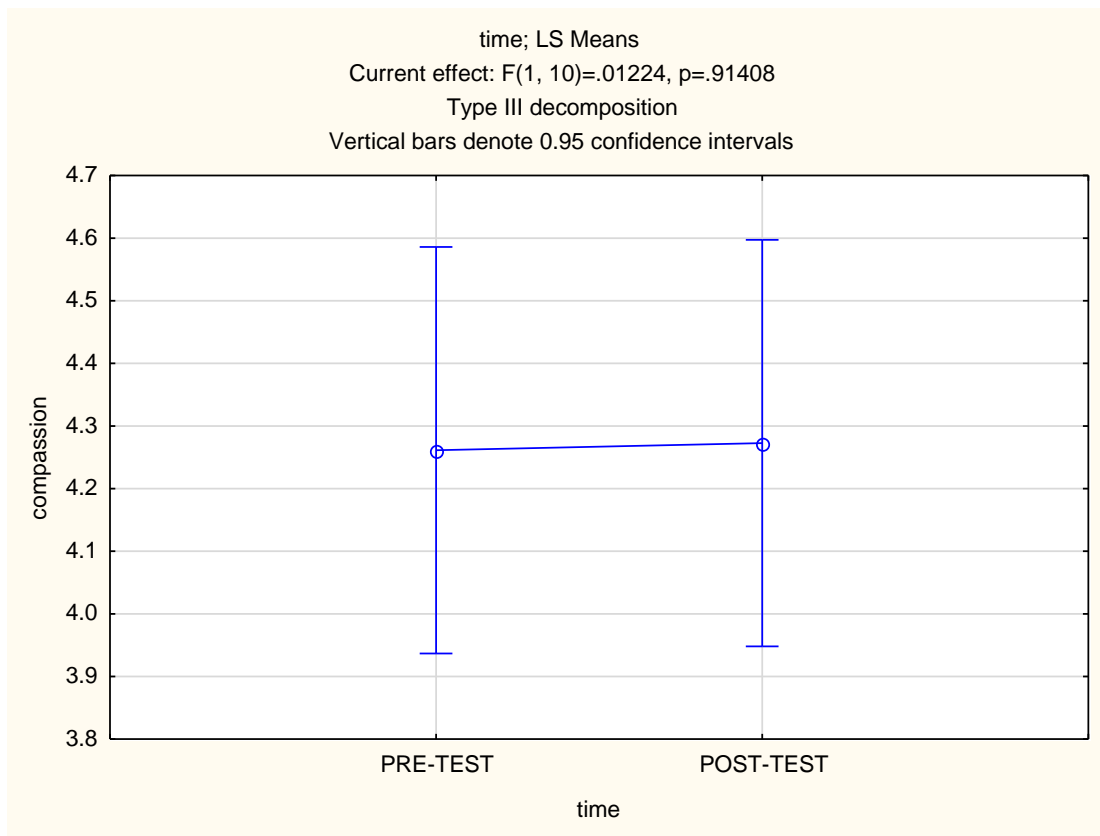


Figure 9: CTSS Full Scale, Pre-Post Test difference between the group mean scores

4.2.2.2 Five Facet Mindfulness Questionnaire (FFMQ)

The total *FFMQ* results indicated a significant difference between pre-post test scores, suggesting that the intervention increased the participants' levels of mindfulness ($F(1,10)=13.31$, $p=0.00$). At the 5% significance level, results were significant for subscales *Observe* ($F(1,10)=18.81$, $p=0.00$), *Nonreact* ($F(1,10)=9.05$, $p=0.01$), and *Act with Awareness* ($F(1,10)=5.13$, $p=0.05$), suggesting that the intervention may have led to increases in these three facets of mindfulness. Although, at the 10% significant level, the *Describe* ($F(1,10)=3.96$, $p=0.07$) and *Nonjudge* subscales ($F(1,10)=3.84$, $p=0.08$) would also be significant, with mean scores indicating a trend towards an increase for these two facets of mindfulness.

4.2.2.2.1 FFMQ (Observe)

Table 10 reports a mean pre-test score of 3.10 and a mean post-test score of 3.72. The standard deviation for the pre-test was 0.44 and for the post-test scores it was 0.31. Figure 10 depicts the descriptive statistic results by illustrating a definite increase in average scores between the time of pre and post testing.

Table 10: FFMQ Observe Descriptive Statistics

Effect	Descriptive Statistics (Spreadsheet in PRE-TEST&POST-TEST SCORES_			
	Level of Factor	N	FFMQ(Observe) Mean	FFMQ(Observe) Std.Dev.
Total		22	3.41	0.49
time	PRE-TEST	11	3.10	0.44
time	POST-TEST	11	3.72	0.31

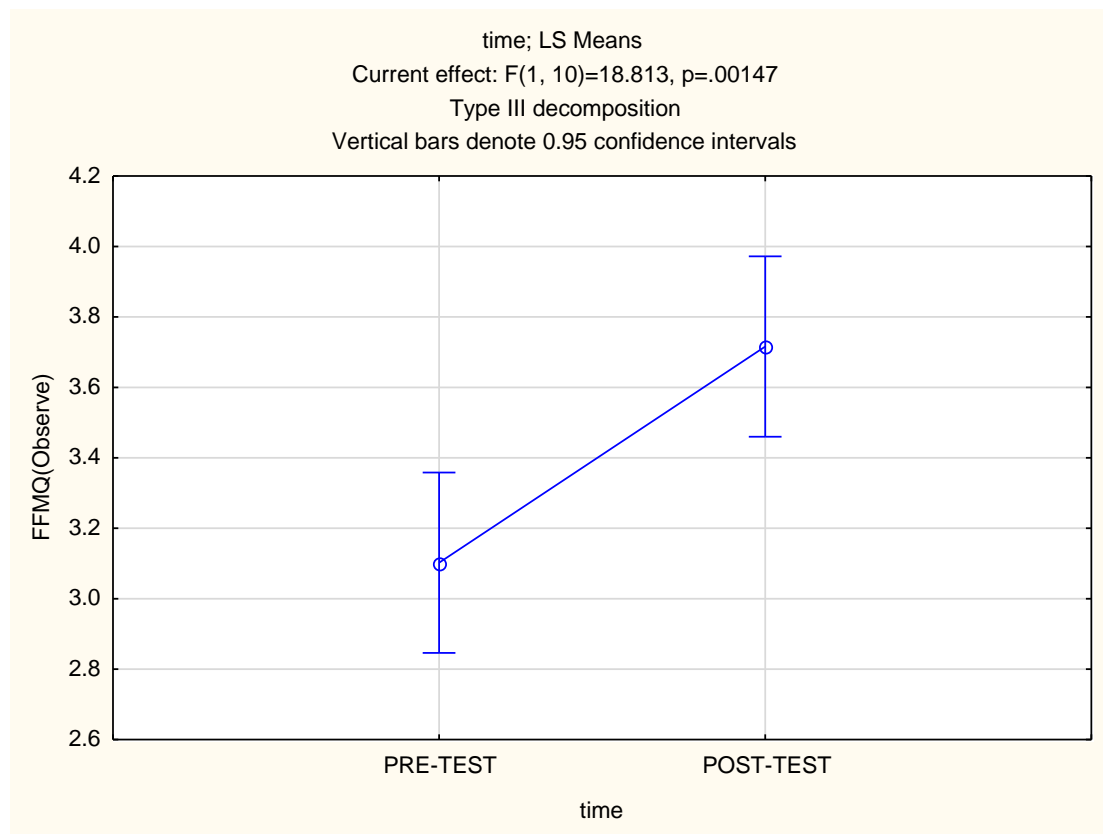


Figure 10: FFMQ Observe, Pre-Post Test difference between the group mean scores

4.2.2.2.2 FFMQ (Describe)

Table 11 reports a mean pre-test score of 3.45 and a mean post-test score of 3.64. The standard deviation for the pre-test was 0.62 and for the post-test scores it was 0.47. Figure 11 depicts the descriptive statistic results by illustrating an increase in average scores between the time of pre and post testing.

Table 11 Table: FFMQ Describe Descriptive Statistics

Descriptive Statistics (Spreadsheet in PRE-TEST&POST-TEST SCORES_Jl)					
Effect	Level of Factor	N	FFMQ(Describe) Mean	FFMQ(Describe) Std.Dev.	
Total		22	3.55	0.54	
time	PRE-TEST	11	3.45	0.62	
time	POST-TEST	11	3.64	0.47	

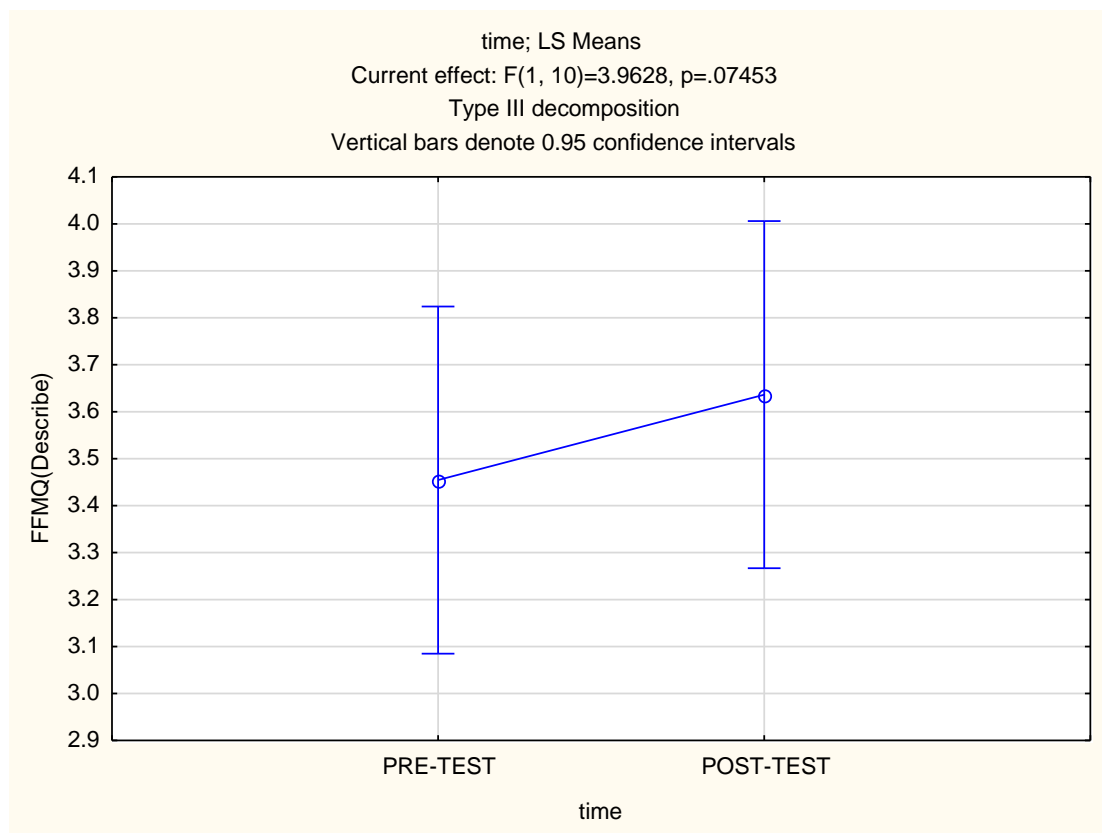


Figure 11: FFMQ Describe, Pre-Post Test difference between the group mean scores

4.2.2.2.3 FFMQ (Nonjudge)

Table 12 reports a mean pre-test score of 3.00 and a mean post-test score of 3.61. The standard deviation for the pre-test was 0.83 and for the post-test scores it was 0.63. Graph 4.10 depicts the descriptive statistic results by illustrating an increase in average scores between the time of pre and post testing.

Table 12: FFMQ Non-judge Descriptive Statistics

Descriptive Statistics (Spreadsheet in PRE-TEST&POST-TEST SCORES_JUN					
Effect	Level of Factor	N	FFMQ(Nonjudge) Mean	FFMQ(Nonjudge) Std.Dev.	
Total		22	3.31	0.78	
time	PRE-TEST	11	3.00	0.83	
time	POST-TEST	11	3.61	0.63	

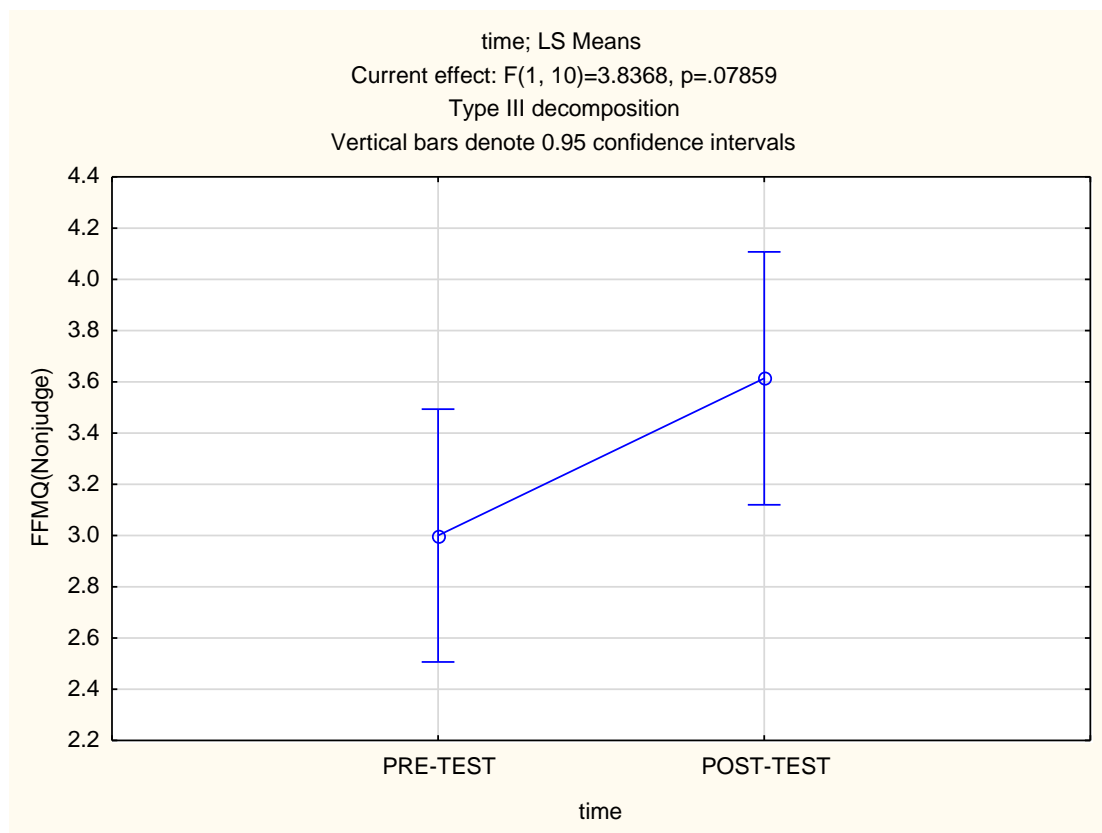


Figure 12: FFMQ Non-judge, Pre-Post Test difference between the group mean scores

4.2.2.2.4 FFMQ (Nonreact)

Table 13 reports a mean pre-test score of 2.96 and a mean post-test score of 3.38. The standard deviation for the pre-test was 0.49 and for the post-test scores it was 0.37. Figure 13 depicts the descriptive statistic results by illustrating a definite increase in average scores between the time of pre and post testing.

Table 13: FFMQ Non-react Descriptive Statistics

Descriptive Statistics (Spreadsheet in PRE-TEST&POST-TEST SCORES_JL					
Effect	Level of Factor	N	FFMQ(Nonreact) Mean	FFMQ(Nonreact) Std.Dev.	
Total		22	3.17	0.47	
time	PRE-TEST	11	2.96	0.49	
time	POST-TEST	11	3.38	0.37	

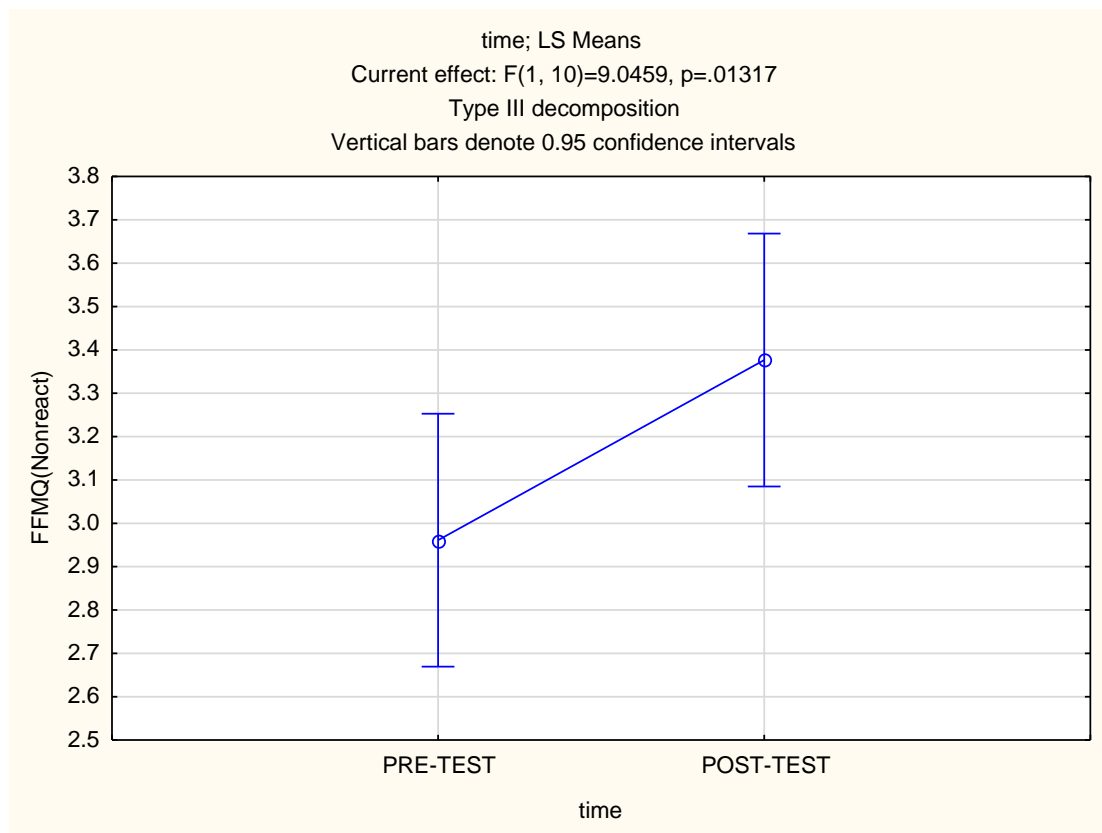


Figure 13: FFMQ Nonreact, Pre-Post Test difference between the group mean scores

4.2.2.2.5 FFMQ (Act with Awareness)

Table 14 reports a mean pre-test score of 3.17 and a mean post-test score of 3.59. The standard deviation for the pre-test was 0.89 and for the post-test scores it was 0.61. Figure 14 visually depicts the descriptive statistic results by illustrating an increase in average scores between the time of pre and post testing.

Table 14: FFMQ Act with Awareness Descriptive Statistics

Effect	Descriptive Statistics (Spreadsheet in PRE-TEST&POST-TEST SCORES_JUNE&SEPT2016)			
	Level of Factor	N	FFMQ(Act with Awareness) Mean	FFMQ(Act with Awareness) Std.Dev.
Total		22	3.38	0.77
time	PRE-TEST	11	3.17	0.89
time	POST-TEST	11	3.59	0.61

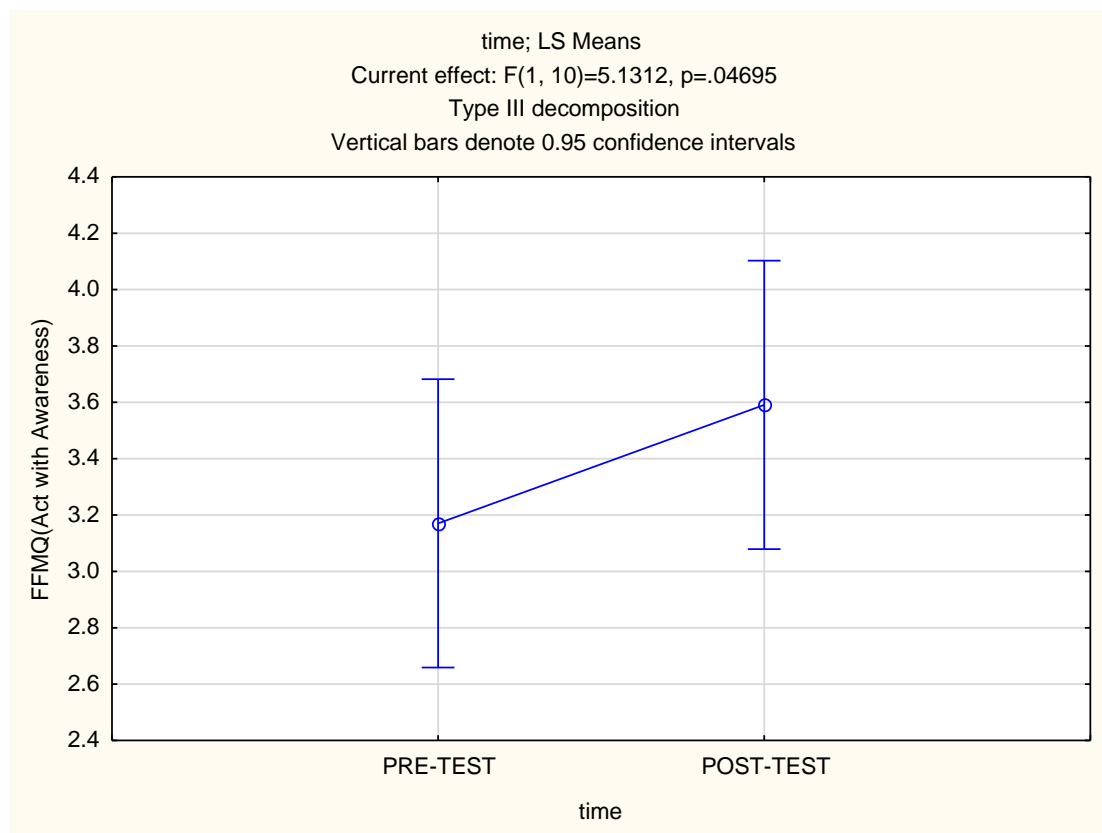


Figure 14: FFMQ Act with Awareness, Pre-Post Test difference between the group mean scores

4.2.2.2.5 FFMQ

Table 4.26 reports a mean pre-test score of 3.14 and a mean post-test score of 3.59. The standard deviation for the pre-test was 0.43 and for the post-test scores it was 0.17. Graph 4.13 depicts the descriptive statistic results by illustrating a definite increase in average scores between the time of pre and post testing.

Table 15: FFMQ Full Scale Descriptive Statistics

Effect	Descriptive Statistics (Spreadsheet in PRE-TEST&POST-TEST)				
	Level of Factor	N	FFMQ Mean	FFMQ Std.Dev.	
Total		22	3.36	0.39	
time	PRE-TEST	11	3.14	0.43	
time	POST-TEST	11	3.59	0.17	

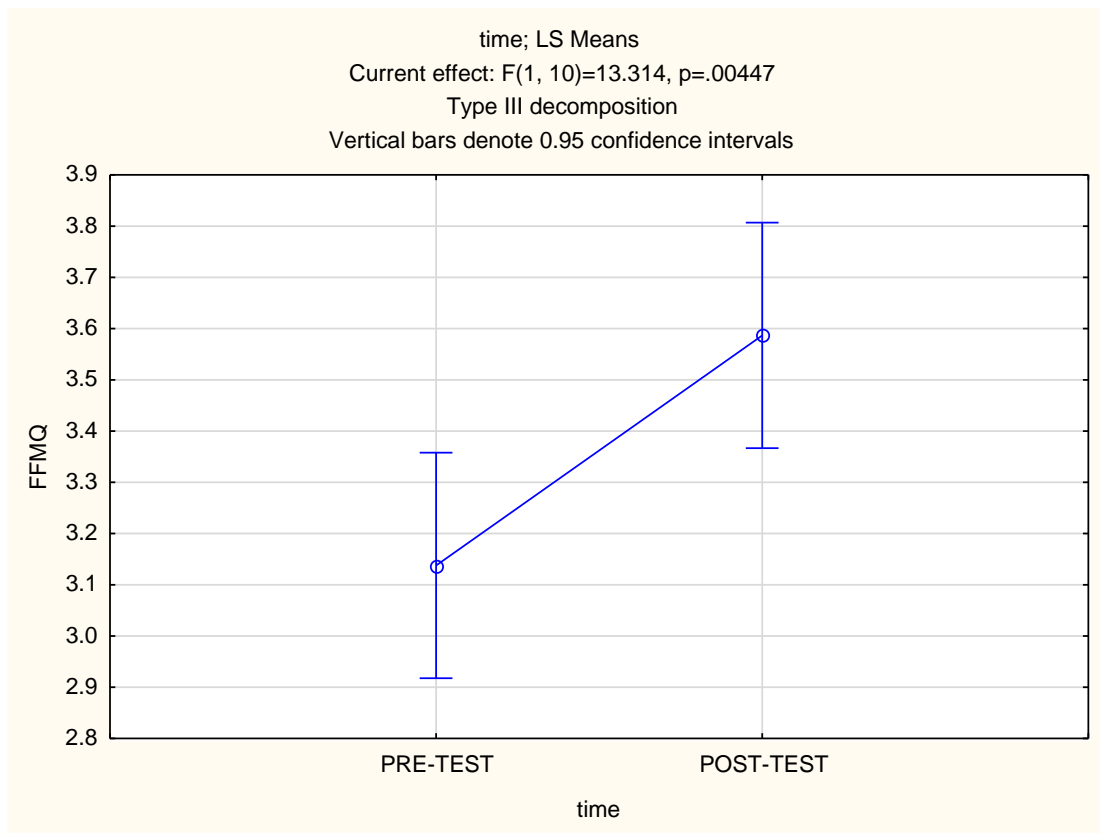


Figure 15: FFMQ Full Scale, Pre-Post Test difference between the group mean scores

4.2.2.3 Summary of quantitative results

The levels of compassion towards students remained fairly consistent, with no significant changes reported. However, the significant results of three facets of mindfulness of the FFMQ, namely *Observe* ($F(1,10)=18.81$, $p=0.00$), *Nonreact* ($F(1,10)=9.05$, $p=0.01$), and *Act with Awareness* ($F(1,10)=5.13$, $p=0.05$) suggest that the mindfulness intervention contributed to the increase in mindfulness within these facets. Furthermore, the *Full Scale* ($F(1,10)=13.31$, $p=0.004$) suggests that there was an overall significant increase in mindfulness.

4.2.3 Qualitative research findings

4.2.3.1 Introduction

One week after the mindfulness intervention terminated an audio-recorded focus group discussion was held with 10 of the 11 participants. As noted in Chapter 3 the recording was transcribed to generate the qualitative dataset. The data was descriptively coded, organised according to themes and subthemes and thereafter a thematic analysis was performed (Neuman, 2007, Saldana, 2009). A thematic analysis is a process of identifying patterns and highlighting various topics in the data to elicit meaning from the text. I posed ten questions to the group, in a semi-structured manner, which allowed each participant an opportunity to respond to the question, as well as to provide additional commentary. The findings are presented in a cross-case analysis, where individual participant responses were compared to one another. The themes and sub-themes that emerged from the original data set are tabulated below. It is important to note that the focus group dealt with both the substantive impact of the intervention on mindfulness and compassion, as well as the participants' experience of the structural organisation and process of completing the programme. Owing to the large investment of time of each participant to fully engage in the intervention, I chose to allow space for reflection on both aspects as a way of assessing the overall efficacy of the process.

4.2.3.2 Thematic analysis

Table 16: Themes and subthemes from focus group feedback

THEME	SUBTHEME
2.1. The Mindfulness Intervention	Organisation Facilitation Mindfulness practices
2.2. The Mindfulness Course as a tool for supporting teachers	Stress management Presence Listening Compassion Acceptance Non-judgment
2.3. Introducing students to mindfulness	
2.4. Experience of completing the questionnaires	Reactions to questionnaires Pre-and-post differences Reflection
2.5. Motivation to complete the course	Commitment Social desirability Interest and curiosity Convenience and affordability
2.6. External influences	

4.2.3.3 *The mindfulness intervention*

As noted in Chapter 3, a qualified mindfulness trainer, together with her assistant, facilitated the mindfulness intervention.¹⁰ The facilitator administered her own enrolment forms, and undertook a 10-15 minute one-on-one conversation with each of the participants prior to the commencement of the intervention. These forms and the conversation remained confidential and I did not have access to the completed documents. However, based on the facilitator's feedback from participants it was reported that all participants were able to participate in the course.

Through the vehicle of the focus group, I aimed to gain insight into how the participants experienced the mindfulness programme. Participant experiences were categorised into three subthemes that emerged: organisation, facilitation, and mindfulness practices.

4.2.3.3.1 Organisation

The sessions started punctually at 15h30 and ended at 17h30 on Mondays after the school day during the third academic term of 2016. The programme was organised across eight different themes with a

¹⁰ The words 'intervention' and 'programme' are used interchangeably; for the research purpose the researcher used 'intervention', however participants were more inclined to use 'programme' or 'course'.

specific focus associated with each theme. For example, week one was themed 'Coming To Awareness', with a specific focus on an introduction to mindfulness, and intentional living; week two was themed 'Coming Back To Breath', with a specific focus on paying deep attention to the sensations that arise in certain areas of the body; week three was themed 'Noticing And Being Present To Difficulty', with specific attention on noticing the body's reaction to any difficulties that arose. Each session, according to the facilitator, built upon the subsequent session, by starting with mindfulness education and simple mindfulness techniques as a foundation, and then gradually developing upon these techniques to develop more in-depth practices. After each session participants received a Home Practice Worksheet, with a summary of the key learnings from the session, an outline of the suggested formal and informal homework practices, as well as any additional worksheets pertaining to a particular exercise.

Participants remarked on how the course was structured by stating, *"It wasn't like too much information in one session. It was like building blocks"* demonstrating *"good progression"*. Overall, there was general consensus that the programme was *"well planned"* and *"thorough"* suggesting that each theme was carefully covered with attention to detail. *"[T]he programme was very comprehensive and covering quite a lot of different aspects which was helpful and very practical"*

While one of the participants agreed the programme was convenient and certainly one of the reasons she participated, she did note that for certain activities, such as mindful movement, she felt uncomfortable being based in a classroom on the school campus.

I think partly it was because of the space, it was the classroom and with colleagues, it was a safe space but I chose to go to [off site location of a particular physical activity class]. I think possibly a degree of self-consciousness around that, even though the facilitators did manage to create a very safe space amongst us.

While she explains that this discomfort may be attributed to the physical classroom environment, the self-consciousness that is reported may also be attributed to the familiarity of participating with work colleagues, and exposing another, perhaps more personal or vulnerable side in a professional arena.

4.2.3.3.2 Facilitation

The general consensus from all participants was that the facilitators created a safe, warm and comfortable environment. Confidentiality, as an overarching principle, was discussed from the start and participants appeared to respect the process as well as each other throughout the programme.

“[T]he feeling of mutual respect and allowing people to say what came up and feeling safe in that environment” appears to have provided security and freedom for participants. One participant stated, *“I felt the atmosphere of warmth made the process very easy, so being able to come in and just feel comfortable and relaxed”*.

Mindfulness was discussed as a conceptual practice, as well as a practical experience, which participants appreciated, *“I found that the tips that they gave in terms of like how to understand the process and education very helpful.”* This knowledge and experience that was demonstrated by the facilitators seems to have contributed to the safe space created. One participant noted, *“I felt that they knew exactly what they were doing”*, and another, *“They came across as very strong”*. While the facilitators appeared to be “strong” and “knowledgeable”, they were non-threatening in their guidance and participants felt at ease. This may illustrate that the facilitators were able to contain the group and professionally facilitate the mindfulness training process in a gentle, yet dynamic manner. Three participants commented:

[1] What I enjoyed was knowing that for two hours I could just be quiet and concentrate on me and be walked through the process.

[2] I felt very comfortable I never felt as though I was doing or expected to do something that I did not feel comfortable with.

[3] I also found that there was a great comfort in the sessions and things were done in a very unthreatening scenario.

Gathering together as a group, and being guided by a professional facilitator, emerged as a strong motivating reason for participants to return week-after-week to complete the course. While the knowledge of mindfulness and homework practices formed core components of the programme, an essential element of the course was to experience the process of *guided mindfulness practices*. The facilitator-led mindfulness practices presented participants with an opportunity to surrender to the moment and experience present moment awareness, while being held by the group facilitation process. For many, this guidance made being mindful easier. *“Being guided through by facilitators, it was much easier to stay focused with them being present.”* One participant highlighted that the voices of the facilitators became a great source of comfort.

I think I got so used to their voices...I wish I had recordings of their voices because I've done other recordings and I don't know I guess there's just another connection because I've been with them longer. So yes definitely our sessions on a Monday I found a lot easier than my ones at home. Because I was guided by them.

All participants expressed a deep respect for, and comfort with the facilitators, suggesting that presence and guidance of a trained facilitator is a meaningful, contributing factor to the participants' experiences. Two participants commented:

[1] [T]hey were such great facilitators, which really made it easier."

[2] We had the wonderful gift of [the facilitators' names] who were fantastic as well. So that really was a lucky thing that we did not want to miss out on [facilitator names].

Both facilitators were female, and ten of the 11 participants were also female, leaving one male participant. This participant maintained he had positively grown as a person through the programme and appreciated the facilitation process. He said "[Facilitator One] *and* [Assistant Facilitator] *were such great facilitators, which really made it easier*". However, he also expressed a genuine discomfort at being the only male in the group.

Being the only male here I found it extremely difficult. I don't think I fully got to grips of what was asked. Feeling maybe because I didn't get what they were saying on many occasions. But I did grow as I mentioned before. I don't know if my other male colleagues would be open to such a challenge. If I could do it again I don't think I'd do it, no offense ladies, with ladies. I don't think that there was, for myself, I did feel at liberty to share some of the stuff because I don't think it would have been seen. So I was a little reserved in what I was saying and thinking. So yes if I had to do it again it would probably be with a group of men maybe or online. Because then you've got a little bit of a safer space.

His comment suggests that the gender imbalance may have affected his experience, as it seems as if he felt inhibited to authentically express himself, and therefore did not feel fully understood.

4.2.3.3.3 Mindfulness practices

As mentioned in Chapter 3, the programme involved a gradual introduction to a number of basic mindfulness practices that bring awareness to bodily sensations, emotions and thoughts. These practices included body scan, sitting meditation, walking meditation and "Awareness of Breath" exercises. Each session provided an opportunity to perform different practices, as well as to discuss the experience of the practices and homework during a period of enquiry.

Group practices with the facilitators

Participants responded differently to the various practices and the weekly themes that accompanied the practices. Some participants found the mindful-movement and mindful-walking practices "easy" and "*preferable*", others tended to differ and favoured more stationary practices such as the silent,

sitting meditations, or body-scan. A few found all practices easy, while one participant noted that *“nothing came easily”*.

One of the participants expressed that the movement part was the hardest, *“not because of the awkwardness in the space but I think because it feels like it pushes my boundaries in dealing with discomfort more than the other practices.”* While she stated that she found it helpful it was not something she enjoyed.

Another participant, who also found the mindful-movement practice particularly challenging stated, *“I really am baffled by mindful movement”*, and explained that this could have been partly because of the classroom space and having to perform a physical activity in the company of colleagues.

Hence, like this participant, others may have felt self-conscious performing some of the practices in the company of work colleagues, despite the efforts made by the facilitators to create a safe space. In contrast to the mindful-movement there were other practices this same participant felt more aligned with, *“particularly the body scan and the breathing exercises, because being guided through that was for me a much easier process than doing mindful movement for example.”* She continued to explain that she *“really enjoyed the sitting and that commitment to sitting”*, and described her realisations of the wandering mind, by focusing on the mind’s activity and observing the thoughts, *“it is quite revealing to me to really focus on, and realise how many thoughts can go through your head within a space of a very short period of time.”*

Other participants found the mindful-movement practices enjoyable and liberating. One participant described her experience of the mindful-walking practice. *“It was like a wow moment because you don’t really take notice of every step that you take with the different parts involved. So ever since I’ve been doing mindful movement, my senses were heightened.”*

Another participant expressed that the entire process of sitting was very difficult. *“So mindful movement, mindful walking, mindfully washing dishes like that I can do much more easily”*, but sitting still was more of a challenge as it was difficult to not become restless. Particular practices this participant found useful were the raisin meditation, the flower meditation, and mindful-movement. *“Because then I can be mindful but not sit still”*.

One of the participants claimed that the body scan was the “*best*” activity. Another participant found the process of detecting sensations in the body particularly challenging.

I didn’t get it to be honest. I couldn’t say where was I feeling a sensation... So the whole being in tune with the emotion and what sensation in the body, I couldn’t say, I knew what the emotion was but not the sensation. I couldn’t feel it.

Lastly, one of the participants expressed a deep struggle with a theme that was presented at one of the sessions. “*It was very difficult for me at the time in my life*”, especially to engage properly with the meditations, but she continued to state, “*I also found it the most useful actually of the whole lot.*”

Homework

At the end of each of the sessions, participants were presented with homework practices. These generally included a body scan or mindful-movement practice (suggested time: 25 minutes), a sitting meditation for a specified length of time (around 15 minutes, some days 30 minutes was suggested), a breathing space pause (three minutes) as well as other simple informal practical mindfulness practices, such as each day recording a pleasant thought on a sheet of paper. All participants appeared to concur that the required amount of time to perform the daily homework, particularly the meditations, was “*very difficult to fulfill*”. One participant went so far as to say “*I suspect if I’ve know that [referring to the daily homework] coming into the programme I might have hesitated before signing up.*”

Another participant expressed a desire for a shorter meditation time, she stated, “*I kind of wished in a way that we built up, starting on ten minutes*”. Whereas the requirement for the formal homework in the first week was a 25-minute body scan a day, and about from the second week onwards it was on average 50 minutes a day (25-minute body scan or mindful movement, a 15 minute sitting meditation, and three minute breathing space meditation).

I just couldn’t find the time in the week and I really wanted to do the homework sort of every week so that I can see progress but I found that really hard, just the sessions here were easier than trying to take them home and doing them independently.

However, a number of participants alluded to the fact that they adjusted the required daily formal homework to a time period that they felt they could commit to. One participant inferred that not being able to achieve the requested meditation time left her feeling guilty. However, “*when I broke it down into chunks that I could manage, the guilt left. So I felt more at ease to do it.*” Other participants explained:

[1] What I did about that though [not being able to fulfill the required homework time] was I eventually realised fifteen minutes is what I can do and commit to and weekends it could be longer and then I relaxed.

[2] So it was just about adapting to the programme to what I could manage without getting like really restless.

In general, participants reinforced that the homework expectation of meditating for 50-minutes a day, was extremely challenging, and for most the only way they were able to fulfill some form of homework was to reduce the time to what they believed they could commit to.

4.2.3.4 Mindfulness: a tool for supporting teachers

The subthemes and various comments below describe how mindfulness provided this group of teachers with a form of support that they could draw on. One participant highlighted, *“When you are teaching, when you are planning it will help in every single area, dealing with colleagues, dealing with people, parents.”* Like this participant, others describe the various ways in which the practices they learnt during the programme assisted them.

4.2.3.4.1 Stress management

It appeared that there was general agreement that the mindfulness programme had a *“calming”* effect and may be a useful stress management tool for teachers. One participant explained that the programme supported her as a teacher.

Mak[ing] me calmer, more present, less tense, and less stressed about covering the content; which will then iterate to the students that the content is secondary, the skills are first. So helping them gain perspective by not having a stressed teacher.

This comment suggests that by being a *“calmer, more present, less tense, and less stressed”* person in the classroom, allows the emphasis to shift from covering the content to developing and enhancing skills through learning.

The testimony of another two participants confirms the point illustrated in the comment above. The first states, *“if you are less stressed you will have a far more impact, your teaching will have a far more impact”*, once again suggesting that the teaching process, which is ultimately to facilitate learning, becomes more impactful. The second comment, which was made with reference to classroom

behaviour, states *“if I can take on more of the practices [mindful practices] it will definitely keep me in a calm state of mind.”* Again, this comment reiterates the previous comments, which all imply that the mindfulness practices had an overall calming effect, which was beneficial to not only the educator, but to the students engaging in the learning process facilitated by the educator.

Self-regulation

Several participants mentioned the regulatory effect the programme had on them, specifically regarding their emotions. There seemed to be a shift in the way participants responded to students, colleagues, and parents as a possible consequence of the programme. *“There are definitely times where I noticed I reacted differently to how I would have before.”* This response differed from the standard impulsive, emotional reaction. There appeared to be a realisation that *“you can change the way you react rather to how you respond.”* This participant continued to explain that as a consequence of responding rather than reacting *“I don’t seem to get annoyed as easily”*. Therefore, this shift impacts *“the way I’ve dealt with myself, and how I deal with other people and how I see other people.”*

Another participant believed that she is more in tune with her students *“I am probably sensitive to not only what they say but how they say it and even those who don’t speak.”* This same participant continued to explain, *“I think I am learning to be more quiet with myself, to read them [the students], and then respond accordingly.”* The developed sensitivity appears to have allowed this participant to alter how she processes inputs from the students, and what response she believes is most appropriate in the moment. She also noted, *“it [the programme] has given me the tools to deal with my instinctive fight or flight reactions and I think if more teachers do this and have the same tools the kids would benefit.”* The flight-and-fight reactions this participant refers to are directly linked to the way we respond to stressful situations.

One participant firmly believed that mindfulness is a form of self-regulation, and directly linked this to how one managed stress. Furthermore, this participant explained that if he could demonstrate to the students, how to manage his stress and emotional reactions, and they could realise this, and in turn learn how to better manage their emotional reactions, this could be very beneficial to them, particularly regarding performance anxiety at school.

If I can get that [to manage stress effectively] across to my class, the classes that I am teaching and they in turn start realizing the calming effect of what I am doing and the whole mindfulness process where they can at least start feeling governed by their own emotions... that is what I really would like them to do. So going forward that is what I would like to see them do ...to calm themselves down before an exam, you know?

He continued to describe the high levels of anxiety and how mindfulness could be a beneficial tool to contain and manage the anxiety among the students and teachers.

I think it [emotional-regulation] starts with us [teachers] but I think we also need to, as much as we are practicing calming in the class, we need to come to the point where we actually get to the point how they can actually get to do it themselves. To regulate themselves.

This participant acknowledges the importance of teachers being able to demonstrate and practice self-regulation, before there is an expectation on the students to be able to do it, but that self-regulation is also a valuable life skill that needs to be encouraged among students, and they need to be taught how to self-regulate.

This participant expressed a desire for the students to be able to experience the benefits of a mindfulness intervention too.

Take control of the situation and emotions, regulate their emotions, deal with it and move on. I think there is a lot of benefit in that because I think as you've already mentioned [signalling to one of the other participants] their performance is really directly or indirectly affected by how they react emotionally. Anxiety is overruling everything, when performing exams or in life situations. That is what I'd like to see is how to get [the students] to regulate their own emotions and that way it would be a strengthening of their own performances and who they are as people.

Therefore, as described here, it is suggested that mindfulness practices may be a way to better regulate emotions and ultimately empower not only teachers, but students too.

One participant stated, *"I am far more careful and respectful and gentle with both myself and my students,"* suggesting a careful regard for the way she conducts herself and engages with students in the classroom. Another participant shared her personal experience of regulating her emotions in the classroom after her exposure to the mindfulness programme. *"I teach various classes and if one class makes me upset it is not going to keep me in a bad mood for the next class. I sort of refresh and start again, ... and I definitely felt that."*

As is also noted under the subtheme of listening, one participant believed she was better able to *"actively listen"* and pause before reacting emotionally. *"...taking it in and letting it settle and think and sit and ponder you know all of those cognitive processes rather than rely on my emotional reaction to come to the fore."* This comment illustrates how *"active listening"* skills may form part of the self-regulation process. Furthermore, this same participant also explained the importance of allowing oneself time to listen and process inputs, for example information received or emotions experienced.

“it is okay, there can be a period of time, it might be a few seconds or it might be saying, ‘can I think about that and I’ll get back to you tomorrow?’ and that is okay. But it is creating that space in between having to, so that you’re not reacting you are in fact giving a measured response to an issue or a question, whatever it might be.” It is suggested that this “space in between” may be what dissipates the impulsiveness to react immediately, and rather than giving an emotional ‘disregulated’ reaction (Kabat-Zinn, 2013, p.280), to be able to provide a “*measured response*”. This sense of measure alludes to the self-regulatory process that aims to restore balance.

4.2.3.4.2 Presence

The notion of ‘presence’ arose throughout the feedback session. Since partaking in the programme participants reported more present mindedness when teaching, engaging with students, parents and/or staff members. *“Being present in the moment to the students quite stands out”*, demonstrated the shift this participant felt in how she relates to her students in the classroom.

From the comments provided below by some of the participants there appeared to be an association of calmness with this ‘presence’.

[1] So just being calmer and yes more centered on the children in a good way.

[2] Just being more present in the moment and letting things go that are getting flustering to say let’s just do this now and then we’ll get onto that.

[3] It has made me a much calmer teacher and more present to the kids.

Furthermore, this subtheme of ‘presence’ was also associated with prioritising tasks, and attending to the present need that arose, particularly when engaging with students.

When I am in the classroom and having a discussion with one student or the class I make sure that I am fully focused on them and not thinking about other tasks that need to be done that day. So I am far more present, and by focusing only on them I am less worried about the other things...

The participant continued and affirmed:

I have a greater deal of perspective now. So my time with the child is far more important than do I get my photocopies on time.

This comment not only suggests that focusing on one task at a time became more important, but that a shift may have occurred in what is believed to be more of a priority in the moment.

It seemed that for one participant, who also had senior management responsibilities, that being present in the moment allowed her to enjoy the moment. *“You move into the classroom you can say, well this is where I’ve started, this is my first love, this is being with the children, and just actually enjoying that moment without worrying because you know you have to go back to your desk to see another parent or do something else.”* Interestingly, one participant implied that through presence she felt like she had more quality time with the students.

4.2.3.4.3 Listening

Participants maintained that the programme had an effect on the way they listened. *“So you are listening with a different kind of ear and [this] will enhance my work with students.”* Another participant highlighted the importance of the quality of listening. She connected the quality of listening to listening with a genuine concern to understand and using this level of understanding to formulate a response after the “deep” listening has occurred. *“Just listening and listening deeply and listening with as much understanding as possible... and just being able to respond in the correct sort of way.”*

Moreover, the point was made, by three different participants, that listening is very much about being present in the moment, and giving full attention to what someone says or does instead of reacting or mentally formulating a response while the other person is still talking. The first participant said: *“...just feeling present and really hearing what somebody is saying and being less invested in what your plan is or what you are bored with or what input I have to share, but just being with them in the present moment is what stood out.”* The second participant described, *“my default position is to jump into a conversation and to try and fix something”,* but this programme had made her aware *“that what is needed is a great deal more listening.”* After she explained that “active listening” promoted more considered responses, she stated, *“So in many respects, this course came at the right time. Because I am definitely not an expert at it by any means...but I’ve noticed that I think I’m better in terms of listening with humility and openness to what they [the students] are saying.”* The third participant explained that she listens more “objectively”, particularly when dealing with parents. She also alluded to being aware of the emotional undertone of what parents say. *“I think when I speak to parents it’s listening to them, and whatever they are saying is what they feel, and I can objectively listen to what she’s saying.”* She continues to explain, *“I can objectively listen and not immediately be thinking of what I can say to help them along.”*

Lastly, one of the participants demonstrated through the use of an example, how she manages her students differently so that she can listen more attentively. Before she would have six students at her desk all talking at once and *“I just used to sit there and pretend I was listening... but now I am like, hold on you start first, and I am actually just looking at her”* and so each student gets their own chance to receive her full attention and listening.

4.2.3.4.4 Compassion

In this study, the term compassion has been associated with words such as *“kindness”*, *“empathy”*, and *“sensitivity”* in the school environment. One participant noted that she saw her role as an educator as *“engaging their [the students] emotional and psychological being not from an analytical manner but in an empathetic connected manner.”* Another participant provided an example of how she believes she has demonstrated more empathy in the classroom.

I think particularly to a child that is crying in the classroom. Previously I would have wanted to give the rest of them [the students] work to keep themselves busy while I take her out, but I reacted totally different, where I actually left them and concentrated on her solely and took her out because I realized that that was what her need was at that particular time, giving them work wasn't that important as tending to her in that emotional state at that point.... I suppose yes that is where the empathy is displayed in a different way as opposed to in the past.

Similarly, another participant explained that by giving the students more focused attention, *“I feel like I've had more time to deal with things with my girls, you know try and help them...”* She explained that this does not mean solve their problems, but to simply attend to their needs in the classroom.

One of the participants explained that while completing the questionnaire on compassion towards students, it suddenly dawned on her that there had been an emotional shift. She could *“wholeheartedly identify with the compassion”* and for her this was *“really affirming”* because before the course she had begun to doubt herself as a teacher, however her faith was restored in teaching and she now once again believed *“that actually I can do this whole teaching at [the school's name] thing.”* Similarly, when completing the compassion questionnaire, another participant stated, *“I've noticed a shift in how I've answered the questions and how I've grown in compassion.”*

4.2.3.4.5 Acceptance

Participants reported instances where they believed they had become more accepting, both of themselves and of their students. One participant implied that she had become more tolerant of

differences, and stated that she had become, *“More open in my kind of acceptance, and there are multiple ways of being and none of them are wrong.”* Another participant acknowledged a change in how she had become more accepting of doing things that she ordinarily didn’t enjoy doing, but knew she had to do. *“I think there has been movement in that for me to being able to just do the unpleasant thing, or the thing that I am nervous of or don’t want to do”* She explained, for example, like writing a hard email to a parent on a sensitive topic about their child. *“I had noticed that it got a lot easier to sit down and do it without putting it off.”* One of the participants also expressed how the programme has developed her capacity to accept the students as they are. *“It [the practices] will definitely keep me in a calm state of mind and just be able to...accept those children as they are and the beauty of each of them.”*

4.2.3.4.6 Non-judgement

Throughout the group discussion, comments about judgment arose as a key learning from the programme. One participant noted this in relation to the homework practice that she found challenging to perform on a daily basis. However, she came up with the following realization, *“But I suppose part of the practice was to let it go and I didn’t blame myself...that is probably what I’ve found the hardest.”* Another participant’s comment suggests the power of judgment on the mind, *“non-judgment, like being less critical of oneself that makes a difference in your mind.”*

Two other participants spoke about non-judgment in the classroom. The first stated she believed she could better relate to her students when she suspended her judgments, and maintained an open mind, *“not making a judgment, just trying to be open for it”*. The second suggested that self-judgment can be damaging and explained how she found it useful not only in teaching and engaging with the students but being able to also guide students on the topic of judgment.

My class is all about accepting and without adding the value to it and that is something else I’ve found is really helpful. So when [the students] would label themselves as something directly judging themselves then I capture it more easily now because I have more awareness of all of the ways judgment is present. So I can catch it more easily and then kind of get them to interrogate that like so wait you are a bad person for cutting your hair? Or whatever the little things that, the million ways they judge themselves, so that I am now more aware of that to ways that damages them.

One of the participants described a *“breakthrough”* moment when she realized the power of judging emotions. *“By answering and recognizing what these things are, in particular holding and not judging emotions. It felt really good to have had that breakthrough whereas before there is the immediate*

judgement of action taken when you feel an emotion but the distance...” The immediate judgment of an action may imply an impulsive, emotional reaction as opposed to a considered response. This “*distance*” the participant noted, was not elaborated on further, however, when listening to the participant it is as if she suggested that there is a space in-between the emotional experience and the cognitive processing of the experience, that is judgment-free.

4.2.3.5 Introducing students to mindfulness

Several participants recognised that by embracing mindfulness themselves they are serving the students they engage. One of the high school teachers who was participating in the discussion referred to the notion of perfectionism amongst the students, and linked expectations to judgments. She believed that students are particularly vulnerable to the judgments that accompany expectations, especially failed expectations, and that students ought to be encouraged to have the space to reflect on what it is they value and the reasons why they value what they value.

I think that is very liberating especially for the high school perfectionists that we have, where competition of being the best, being perfect are what they feel is expected of them. That they don't meet that expectation, that there is a tremendous amount of judgment and I think that mindfulness would not necessarily disable those very long standing habits but would help them acknowledge or notice them and then choose for themselves. So really interrogating their motives of things and how they apportion value, so I think it is a safe space for introspection and examining how is it that they use their time and energy. I think it could be very valuable.

This comment suggests that judgments are founded on values, and that introspection about the values one holds may be useful in disabling judgments imposed on oneself. The participant continued and applied her insight to herself:

I mean I am type A myself, it is either perfect or it is a fail, and so for me it has just really been an important learning.

Another participant acknowledged that role modeling to students is one way to transfer the mindful awareness. *“If I am able to integrate it in on my own world I think there is a double benefit because it impacts who I am especially as a role model.”* Yet another expressed this in terms of emotional-regulation and believed that if the teacher is able to demonstrate calmness and emotional awareness, the students will be able to learn how to manage their emotions through the teacher's presence and embodiment of the mindfulness practice. The participant explained,

If I can get that across to my class, the classes that I am teaching and they in turn start realising the calming effect of what I am doing, and the whole mindfulness process, where they can at least...govern their own emotions, that is what I really would like them to do.

This reiterates what is stated in the qualitative results reported under self-regulation. A third participant echoed that students learn through the teacher being mindful, and stated, *“looking at the ages that I’m teaching [much younger children] it is more for me to take on mindful practices rather than trying to get my children going because I do believe they can take aspects out of it.”* Hence there was recognition of the importance of teachers being able to demonstrate mindfulness, and exist mindfully in the classroom, as a starting point, before training students specifically in mindfulness practices.

There were several participants who used the mindfulness practices they had been taught in the classroom with their students. However, it was acknowledged that teaching mindfulness to students is not easy, especially if one has not fully experienced the process personally. A participant noted, *“It is a very hard thing to teach if you are not involved with it and don’t really grasp the practices and see the benefits yourself.”* Teachers believed that there are *“definitely some students who respond very well”* and others who do *“not want to go there.”*

Three teachers described scenarios where they attempted some form of mindfulness practice with the students. The first participant, a high school teacher, applied the three minute breathing space meditation with her students and noted that it *“was really helpful when classes would come in and they would be really stressed out”* for example when they had just received marks back from a test they had just written and it was hard to settle the class.

I would begin the lesson by switching off the lights, okay everyone let’s go through this meditation together and I played it and then we could start with the lesson. It was a much nicer way to calm them down than being ‘ah sit, settle down’... because that doesn’t calm anyone down. So that was a really helpful practical tool.

This teacher also noted that *“Sometimes they would ask for it as well”* suggesting that there are students who felt supported by the mindfulness practice she conducted with them. The second teacher, a primary school teacher, described a scenario when her class was attending a science expo. *“They were all extremely nervous and immediately I said to them close your eyes”* and she verbally guided them through a basic mindfulness meditation of becoming aware of their surroundings and emotional states. *“There were some giggles in between but immediately after that they settled down and were all quiet and went into the science expo calmly.”* Third, was also a primary school teacher, who illustrated using basic mindfulness-type practices and how she settled the students down. *“Going into the class where they have changed classes and they were unsettled and I started teaching and I thought I hadn’t actually got these children listening to me yet”*. She continued to explain that she

stopped the class, asked them to close their eyes, and spent some time talking them through a mindful awareness-type practice. *“I did peep and there were some that were absolutely in that moment. There were others kind of looking around and I realized it is something that you have to do often with them in order for them to get it”*. She maintained that *“it certainly calmed them down”* and that *“it was a way of getting them to focus on me.”*

One of the participants explained why she believed it would be really important for both teachers and students to learn mindfulness.

I think that it would be amazing for not only teachers but students to do it [mindfulness] because it places the dignity of the human being at the centre of the classroom, rather than mark achievements and expectations” but rather it acknowledges that we are “first and foremost all people, learning skills together.

This comment suggests when mindfulness is applied, the imagined expectations and the barriers between human beings fade, and humanity as a common denominator is emphasised. *“I think that is very liberating especially for the high school perfectionists that we have.”* There is a sense of freedom that comes with this statement, suggesting that mindfulness could be a *“liberating”* practice for some students.

Another participant, the school psychologist, noted *“In terms of therapy...I think that mindfulness can have such a significant impact in an overall emotional being.”* She explained that *“there is a double benefit”*, not only is she able to *“integrate”* mindfulness into her being and therefore influence her therapeutic skills, but also share the mindfulness techniques and sense whether clients find whether these techniques are *“helpful”* or not. She continued by noting that the person teaching mindfulness to students needs to be well trained and experienced, *“I think it is a very hard thing to teach if you are not well grounded in it.”*

After the first session of the mindfulness programme, senior staff members participating in the programme decided to recruit the facilitators to introduce the concept of mindfulness to the high school students. A participant stated that

by midway through term four every single high school class would have had a session with [the facilitators’ names]. We started off with grade eleven’s and ten’s we’ve almost completed. I think we’ve got one or two classes who still need to see them and we’ve got the grade eights and nines lined up in weeks two, three and four in term four. I’ve been in the first of the sessions and I will be in all the sessions next term. The [school psychologist] has been in a number [of sessions] and we made sure our [school principal’s name] has attended a couple. Just to get a sense of what it is all about. I think there could be very valuable feedback from the students.”

This initiative suggests that the teachers participating in the programme believed that this was something worthy of sharing with their students, right from the start of their experience of the programme.

Furthermore, one of the participants also expressed an idea that she believed would be beneficial to the students, and which she, as a senior leader of the school, would like to introduce to other staff members and ultimately implement over the student examination period.

I would love to roll this out with the students before exams. So instead of just having a ten-minute reading time, which we do have, we have fifteen minutes. So it is five minutes for calm, with face down, and I've given this a great deal of thought, and then you have your ten minutes reading time and then you start the exams.

She continued to explain that this might be one way to dissipate performance anxiety and restore a sense of inner calm.

4.2.3.6 Experience of questionnaires

The questionnaires that were administered pre and post programme, were exactly the same questionnaires, namely the Five Facet Mindfulness Questionnaire (FFMQ) and the Compassion Towards Students Scale (CTSS). The pre-set were completed eight weeks before the programme commenced, and the post-set were completed one week after the programme had terminated. Participants' comments on how they experienced the questionnaires in terms of what their reactions to the questionnaires were, the differences in how they approached the pre-and-post sets, as well as their reflections and insights on the questionnaire process were documented and are reported below.

4.2.3.6.1 Reactions to the questionnaires

Some participants were curious and found the questionnaires interesting to complete. This was deduced from comments such as *"I find questionnaires fine and interesting to do"* and *"I felt genuine curiosity."* One participant described an element of self-competition, and explained that she viewed the questionnaire items as a challenge to be solved. *"When I see a questionnaire I want to work out what is the right answer."*

Others maintained a slightly different perspective on the questionnaires. *"I think it can be quite threatening to fill out a questionnaire but knowing that it is just for you [implying herself] as a personal*

growth that is what I take from it.” This comment demonstrates that participants might initially have felt exposed and vulnerable when completing questionnaires concerning their personal behaviour in a professional space. However, it also illustrates that like this participant, if considered as a personal growth tool, there may be relief and reassurance in knowing that there is no right or wrong answer. Finally, one participant shared her instinctual reaction to completing all questionnaires, which is “*oh no, questionnaires!*” She continued to explain how she loathes the thought of spending time filling in questionnaires.

It just felt like it was so hard finding time to fill in a questionnaire, so I just wanted to get through it as quickly as possible. Now, so that was the first thing and then this time I was interested as well to kind of see if there was a difference and relook at the questions, there was still a ‘no on questionnaires’ but there was a bit more of an acceptance of like just I think, I think there has been movement in that for me to being able to just do the unpleasant thing, or the thing that I am nervous of or don’t want to do or whatever.

While she still does not enjoy completing questionnaires, she believed she was more accepting of completing “*unpleasant*” tasks.

4.2.3.6.2 Differences in completing the pre-and-post questionnaires

There appeared to be general trend in how participants answered the pre-and-post questionnaires. Several participants highlighted that the first time they completed the pre-questionnaires they did so impulsively and perhaps in a more thoughtless manner, whereas the post-questionnaires were completed more “*mindfully*”.

[1] Initially when I filled in the first set I don’t think I really thought about what I was answering. I was instinctively and immediately answering, this time around I actually thought a bit more about what these questions meant and so I think I was more mindful in answering these questions this time around.

[2] I have very little memory of filling in the questionnaire the first time around which I think shows the degree of or lack thereof in awareness in doing it.

[3] I must have done it [completed the questionnaires] very impulsively and I definitely put more thought into it than I just filled this one in and had to be quite honest with myself.

[4] This time [the first time] it was basically doing it for the sake of doing it and the second time around was more mindful.

[5] I couldn’t remember what I’ve said eight weeks ago but I definitely did it with more intention this time around and I know there was a shift.

The timing of the pre-questionnaire was towards the end of the second academic term, whereas the completing of the post-questionnaires was at the end of the third term. While participants reported that they were far more stressed at the end of Term 2 than they were at Term 3, it is not clear as to whether this was the course that impacted the stress levels, or whether it was the teaching demands (such as exams) that may have differed between terms, or perhaps a combination. It was noted, by several participants at the time of filling in the pre-questionnaires, that they felt stressed due to managing school obligations, however, were much calmer at the time of completing the post-questionnaires. One participant remembered that when she completed the first set of questionnaires she felt like her answers made her sound like *“a monster”* because she was so stressed. *“I said you need to correct this because I’m filling it in and I am a monster filling in this form out because I can’t anymore. I’ve reached breaking point.”* This comment reflects the desperate state the participant had been in prior to the programme, and highlights the level of stress she was experiencing as a result of her profession. Another participant commented, *“I actually think for all of us we have come a long way since then [the time of completing the pre-questionnaires].”* She maintained that she couldn’t remember filling in the first set of questionnaires, but that the second time, *“was more mindful in what I answered”*.

The participant who observed herself as being competitive, trying to find the *“correct answer”* when completing a questionnaire believed that *“filling in now the second time I find myself going no it is not about what is the correct answer it is about what you actually feel and think. It is not about being judged it is about reflecting. So I am working on that.”* Like her, other participants noted personal ‘shifts’. *“I couldn’t remember what I’ve said eight weeks ago but I definitely did it with more intention this time around and I know there was a shift.”* This shift is not exactly definitive, however it alludes to their being as shift in the respective mindfulness and compassionate behaviour referred to in the questionnaires. This is reiterated further by another participant’s statement, *“I’ve noticed a shift in how I’ve answered the questions and how I’ve grown in compassion.”* Furthermore, one participant maintained she could recall her previous answers, and that answering the questionnaires after the programme was comforting. *“I think because I know my answers I see the progress that I had made. It was warming to know that.”*

Some participants seemed more curious in the post-questionnaire session when they were able to compare or answer the questionnaires in light of the mindfulness programme. *“I think curiosity because there was a certain curiosity in me to see how far I had come or had I come anywhere at all?”*

While some might have felt *“disillusioned”* with the degree of the shift, there appears to be an acknowledgment that this *“shift”* need not be significant, or even profound but rather simple, subtle and, or, small demonstrating a marked awareness and signifying progress.

I felt quite disillusioned with myself because it didn't feel like I have managed to shift all that much in those things [items on the FFMQ questionnaire] but I think it is just also about understanding that it is so marginal and sometimes even if you've got awareness, you know when you are doing something different but you are still a step further.

Another participant stated, *“How much I am not sure but definitely there has been a shift.”*

A participant who performed the role of school psychologist explained her experience of completing the Compassion Towards Students Questionnaire. She *“felt bad”* because, although she couldn't recall her numbers from the first stage of completing the questionnaires, she expected of herself that in her role as a psychologist she should inevitably demonstrate *“good numbers”* on the Likert Scales at both the pre and post stage. She stated, *“But obviously I think the empathy compassion one I feel really bad that I am not filling in good numbers on those ones and as a psychologist.”* This statement hints at feeling guilty towards me at filling in “good numbers”, because *“I kind of wanted to make your study seem good”*. This would also correlate with the notion of social desirability, which is discussed further on in this chapter.

One participant explained the impact the questionnaires had on her, in reflecting back to her the key learning's that occurred over the course of the programme, in particular her ability not to immediately judge an emotion when experienced. She maintained that this had been a *“big step”* for her.

It felt really good to have had that breakthrough whereas before there is the immediate judgement of action taken when you feel an emotion, but the distance and being able to...but I only realized it when I filled in the questionnaire. But this has been a very big step for me and I actually achieved it. I've done it and hadn't realized. So it was really positive filling in the questionnaire.

This point was reiterated by another participants comment, *“what is the most interesting is just to reflect a little bit on where I was and am now,”* as she also believed the questionnaires provided a space to potentially recognise the before and after effect.

4.2.3.6.3 An opportunity to reflect

It sounded like the questionnaires, as well as the focus group, provided participants with an *“opportunity to reflect”* on the mindfulness programme, and what meaning it may have held for them, if

any at all. One participant noted, *“It [the questionnaires] has highlighted what we’ve actually been doing this last few weeks.”* Another participant explained, *“I am a big believer on reflection and I think we don’t give ourselves enough time to do that so filling the questionnaire in this morning proved that it’s a good moment for me to just reflect on the last eight weeks because I actually haven’t and also answering your questionnaire today I was like oh my goodness something actually have happened. There has definitely been a shift in various factors. So yes reflection is very important. So today was good.”* Furthermore, it was suggested that *“reflective practice”* is *“important”* for learning processes. *“I think the reflective practice is a good one. I’ve said that earlier and if that is what we can get from as part of the learning experience that is important.”*

One of the participants shared her perception of what she thought, and perhaps wanted the aim of the course to be, which was stress management. While ‘reducing risk of burnout’ was noted as one of the possible reasons to participate, stress management was not specifically measured or highlighted as a desired outcome of the study. However, this participant explained how stress management is what she focused on throughout the course, and only when the post-programme questionnaires came around for the second time did she realise that compassion was one of the variables being measured.

4.2.3.7 Motivation to complete the course

One participant highlighted, *“nobody dropped out. With all due respect I am quite surprised because it is a big time commitment and I think life happens and yet you got to the end and we are all still here.”* This was unpacked further in the group and some of the influencing factors that motivated the participants to complete the course were noted: convenience and affordability of the programme, interest and curiosity, a strong sense of commitment, the safe space created by the facilitators, and social reinforcers.

4.2.3.7.1 Convenience and affordability

All sessions were held on the school premises in the same large classroom. This was primarily to ensure convenience for participants, allowing them to walk from their classroom or office to the mindfulness programme room at the end of the school day. On the whole, participants appreciated this and comments suggested that the location of the programme was a motivating reason for

participation. *“So it was at school and you know I would probably not ever do it off campus.”* Another participant stated:

I wanted to do this for a very long time and with the opportunity that came along that it was not only on campus which meant it was accessible but also free and that is a big reality.

First, this comment highlights a keen interest and desire to participate in a mindfulness programme, second the convenience of location is noted, and third, the affordability is emphasized as being free and therefore accessible financially. The same participant further substantiates this last point when she stated, *“if we had chosen it on our own accord it is a financial investment of note that would be out of our reach for most of us if not all of us.”* Finances were reiterated by another participant who expressed, *“We all live under a degree of financial stress and that is part of the reason why we put off, and so this was too good an opportunity to miss out on.”* Hence, participants were aware that ordinarily a programme of this nature would possibly be financially valued at an unattainable rate for many teachers, which further motivated them to sign-up and participate.

4.2.4.7.2 Interest and curiosity

Most participants demonstrated a basic knowledge of the concept of mindfulness. When all participants signed up, none of them had participated before in any mindfulness programme. Two of the participants did subscribe to a six-week online introductory mindfulness course, after having signed up for the programme, and started the online course a few weeks before the research intervention commenced. However, apart from these two participants, all participants were fairly new to the concept and experience of a mindfulness programme.

Several participants expressed that they had developed a curiosity about what mindfulness meant and wanted to explore whether it had a place in their lives. Three different participants stated:

[1] This is something that I’ve been wanting to do for years and just haven’t gotten it together and finally was given the opportunity to get it together and for it to happen.”

[2] ...this is also something I always wanted to do

[3] I wanted to do this for a very long time

One the participants jokingly stated that her motive was ‘FOMO’, which is a common acronym used, especially by students, to mean ‘Fear of Missing Out’. She clarified that what enticed her to participate was that

professionally I wanted to understand what it was all about and it was also self-motivation within me because I've always been drawn to it, in a way probably practice some mindfulness in a different context in a spiritual context. I suppose I wanted to understand what it really means to come to grips with it. So it was about me as well.

Another participant explained that she had entered a critical phase in her personal development, and her curiosity and need for support led her to participate. *"I realised I was busy growing and I was busy developing and evolving and so I was curious every time. I knew I needed guidance in this process. I knew that just doing the homework session was not enough for me, I needed to return."*

4.2.3.7.3 Commitment

Statements such as, *"I had committed to it"*, or *"It [this programme] is a commitment."* suggested that many participants believed that when something is started it needs to be finished, and hence they maintained strong ideas about what commitment meant. Different participants reiterated and unpacked this sense of commitment through comments such as:

[1] When you take up a challenge you actually have to finish.

[2] You just show up it is what you do. You meet your commitments.

[3] I must say I don't like giving up on things at all. You know you just want to keep on going and making sure that you do get to the finish line and learn on the way.
When I start something I finish it.

[4] I made the time, normally I do other things on a Monday like other terms but I made the time and I was going to do it.

4.2.3.7.4 Social reinforcement

There were three primary social sources, related to the programme, which may have influenced participant motivation. First the relationship between the participants and the facilitators, second the dynamic and relationships among the group of individual participants, and third the relationship between participants and researcher. These are discussed below.

While all participants agreed that the facilitators were pivotal to the outcomes of the programme, this was further accounted for as part of the reasons for continuation and completion of the course. One participant stated, *"[Facilitator One] and [Facilitator Two] were such great facilitators it really made it easier"*, and another, *"I felt safe in this environment and so I was looking forward to coming here. I*

enjoyed it very much.” Comments such as these suggest that most of the participants felt safe and comfortable in the space created by the facilitators. Furthermore, it seemed as if participants took the confidentiality agreement seriously. One participant expressed, *“that confidentiality candle was weighing heavily”*, which possibly implied that people appeared to be respectful of each other’s privacy throughout, which would have reinforced the security of the group setting.

A common term often used in research studies is ‘social desirability’ effect, meaning that participants may tend to respond in ways that elicit a favourable evaluation of the programme (Rosenthal & Rosnow, 2008). One participant noted,

I was very conscious all through the course of the fact that we were doing this partly as part of your research project. I felt quite a sense of responsibility towards that. It was one of my motivating factors to keep on and not to miss a session.

Another participant explained that she partly returned week after week, because she did not want to be the one person to drop out or to miss too many sessions, and make the data *“difficult”* to *“coordinate”*. *“I knew it was part of your Masters and I think coordinating data, I won’t be the person who made that difficult.”* Both these two comments illustrate that being monitored as part of a research project partly contributed to why they completed the programme.

One participant explained the importance of being able to participate in the programme as part of a *“team”* and fulfilling her role as a team member. She appreciated the social aspect of the group dynamic and believed this to be a motivating reason to come back and participate.

I am a team player so I like it when we are all together we all do everything. It is a lot easier than trying to do it online. I’ve tried a couple of online courses and you know it really doesn’t work for me. I like the whole sharing and we are all in it together and we are all learning from it in different levels. It is a point where we are all learning from each other, you know? I enjoyed that. The social dynamic is also important for me.

One of the high school teachers expressed her curiosity in wanting to get to know people in the broader school community better, and how this enticed her to return week after week. She highlighted that this programme presented an opportunity to become aware of the real lives these colleagues lead, including the stresses and strains of their jobs; instead of simply passing them by on the school premises and greeting from a distance.

Part of it was curiosity about the people in this group because I think I’ve got a chance to see the stresses for prep teachers, for like younger teachers at different stages in their lives and there was a chance to get real insight and understanding into people that I see walking around like I’m only seeing a really small portion of them and [participant name omitted] I hardly knew...look the first view is completely different of what I have now and so whilst still being a professional, in

terms of the boundaries that we respected, I do feel like I understand people so much better now. So I came back because of curiosity, like what other things have I missed about the people around me?

A light-hearted comment was made by one of the participants after she explained that she had allocated time to the programme and was committed. She added, *"You are nice people. Joking"*. As with the other comments noted, this statement suggests that perhaps this participant, and others, felt a sense of belonging, respect, and familiarity with the group and the facilitators, which ultimately encouraged them to return week after week.

4.2.3.8 External influences

All participants fulfilled the requirements of attending six of the eight sessions. Of the 11 participants two participants missed two sessions, six participants missed one session, and three participants attended all sessions. Reasons for missing sessions included: moving house, illness, personal circumstances, and work commitments. These factors would have further challenged participants to comply with the suggested practices and programme sessions. One participant noted that due to difficult personal circumstances she was unable to attend a session, however, what she was learning in the sessions assisted her in dealing with her personal difficulties.

I missed one session due to external factors but I also found that what I learned here I could apply to those external factors and that made it easier to deal with.

Another participant shared that she had also entered a difficult personal space over the course of the term, which made it more challenging for her to do the practices and to follow through with her commitment. However, she also noted, that the course assisted her during this period. She explained,

this term for me personally has been hard but I've stuck the mindfulness course out because I want to do it but at the same time where I've been it has been hard to do the practices because emotionally I am not in the right head space. But then its help too so yes some weeks were good and some weeks were bad. But on the whole, yes...it did help.

One participant highlighted that missing sessions was not ideal as it disrupted the continuity of the process for her.

Yes I also missed two, due to external factors, school commitments on one hand and personal on the other, so I think I missed a lot of the continuity when you do have a gap.

Several participants maintained that it was really challenging to fulfill the homework practices, as many had personal and school commitments that they needed to prioritise.

To make it part of your life and you know what is going on in your life does influence how much time you can spare. As much as your intentions are good.

This participant noted that what goes on in one's life inevitably affects the ability to dedicate time to the practices, despite one's intention to want to do them. An example was provided by one participant who shared, *"I struggled more with the homework because I've moved house twice in the last eight weeks."*

One participant explained that she found the online mindfulness course helpful to reinforce the home practices.

External factors...what actually helped was doing the online mindfulness course because I was finishing that the same time as this one began and actually I really managed to stay more focused and do more while I was doing that course which would have been opposite of what I expected whereas now when it was just this course then somehow I let it all go more.

Another participant described, in detail, her experience of external factors that made it extremely challenging for her to practice the homework. *"It was very hard because in the mindfulness course you are told that there are these external stimuli and you must, you know just tune in."* She continued to explain her current home environment, which included an eleven-month-old golden retriever puppy, as well as her cat, who would both demand attention from her when she was performing the mindful practices at 04h50 in the morning. She concluded:

So I found it very hard not to judge and get angry in my Zen-like moment and I didn't always succeed. So very silly but very practical and challenging.

A participant who was pregnant, noted that she this may have affected her ability to perform the practices, although at the same time she believed that she thinks she's *"just really bad at it anyway."* She stated, *"I am tempted to say that being pregnant made me more tired but as a fact I really don't think that I can say it influenced my home practice, I think I'm just really bad at it anyway."* There was no further explanation of what *"really bad at it"* means as the underlying idea of the practices, is that if one tries them there is no way one can be *"really bad at it"*. However, physiological states of being, such as pregnancy, may impose unfamiliar, internal, experiences that challenge attentiveness and the ability to perform the activities.

The creation of external factors was acknowledged by one of the participants who stated, *"meditate in the mornings, have been my own precious three minutes, I could do it but when I tried it for longer I would create external factors."* This comment suggests that perhaps the *"external factors"* created originated from internal, cognitive activities. Finding oneself in a difficult emotional space may also

challenge one to complete the homework, one person noted, *“Where I am in my life at the moment, it was quite tough to fit it [homework] in.”*

In conclusion, while there did not appear to be a significant public event that affected participation, without delving too much into the personal details of events or circumstances, various participants were able to illustrate the types of challenges that they encountered whilst participating in the programme.

4.3 CONCLUSION

This chapter has presented the quantitative and qualitative data analysis from the data generated by the research. Specifically, it reported on three statistically significant findings from the administration of the FFMQ, as well as on the results of the administration of the Compassion test. The qualitative focus group discussion transcript was also analysed thematically, and pertinent testimony reflected. Chapter 5 synthesises these research results in terms of the key research questions posed in this study.

CHAPTER 5

DISCUSSION, LIMITATIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

This research study aimed to explore the role a MBI may play in supporting teachers' classroom practices and attitudes. The mixed methods research design allowed for both the use of quantitative and qualitative methods to be applied to address both sub questions that were investigated, namely:

1. How effective is the programme at changing self-reported, quantitative levels of mindfulness and compassion in the classroom? The measurement of results was derived from two self-reporting questionnaires, FFMQ and CTSS, completed before and after the intervention. The hypothesis was that the intervention would significantly impact levels of mindfulness and compassion (separately measured); with the null hypothesis stating that mindfulness and compassion would not be significantly impacted by the intervention.
2. What were the participants' subjective experiences of the MBI programme? Various themes were extrapolated from the transcript outcomes of the focus group interview with 10 of the 11 participants.

This chapter discusses the research findings in relation to the research questions, as well as presents limitations of this study. It also offers potential recommendations for a possible future study of this nature.

5.2 FINDINGS AND DISCUSSION

5.2.1 Five Facet Mindfulness Questionnaire (FFMQ)

The FFMQ yielded significant results of three facets of mindfulness of the FFMQ, namely *Observe*, *Nonreact*, and *Act with Awareness*, as well as an overall significant result on the Full Scale, which implies that the mindfulness intervention may have contributed to the increase in mindfulness regarding these facets, as well as overall mindfulness. The qualitative findings from the focus group feedback echo the significant quantitative findings from the questionnaire results. The two facets that did not indicate a significant increase were the Non-judgment and Describe facets; however, descriptively it is noticeable that these facets increased as well. When merging this data with the qualitative data set it is pertinent to note that the Non-judge facet, corresponding with the qualitative theme identified as *non-judgment*, arose as a noticeable positive change for teachers. This theme was also associated with the notion of ‘expectations’ and ‘criticism’ (both to other and self). Teachers highlighted being more aware of not judging both themselves and their students, and encouraging students to do the same. As explained by one participant: “lowering expectations often eases the pressure that people put themselves under, and can reduce anxiety”. Hence, despite this theme not rendering a significant change on the self-reported quantitative measure, it was highlighted as a noticeable change discursively.

5.2.2 Compassion Towards Students Scale (CTSS)

The quantitative results from the self-reported Compassion Towards Students Scale did not yield any significant results when comparing pre and post test scores, although the figures do present a slight increase of compassion towards students. This slight increase corresponds with the qualitative results whereby several participants commented on the subtle empathetic shifts that occurred for them within the classroom environment. This suggests that while the numbers may not have indicated a significant change, when teachers were asked to comment on how they engaged with students during and after the intervention phases, teachers commented on the way they attended to students, drawing on a deeper sense of empathy and understanding, promoting more compassionate responses. Therefore, despite the self-reported quantitative outputs corresponding with the null hypothesis, the verbal

feedback suggested that for most of the teachers a subtle, deeper awareness was generated in terms of how they responded to students.

While there may not have been a significant increase on the quantitative Compassion Towards Students Scale, the qualitative feedback explores the positive subtle shifts towards compassion that teachers spoke of regarding their demeanour in the classroom context.

5.2.3 Theory and practice

Much of the participant feedback strengthens existing literature and reinforces the original theory on which this research is grounded. This is further discussed below.

5.2.3.1 *Importance of expert facilitation*

It appears that all teachers valued the quality of facilitation and expertise of the facilitators, reiterating the importance of ensuring that the person/s leading the mindfulness programme is qualified, experienced, and supportive in their capacity to do so (Crane et al, 2010; Weare, 2014).

5.2.3.2 *Mindfulness practices*

Mindfulness requires attention and concentration, which can be extremely hard to practice, especially if one is not used to 'stilling' the mind. Participants' feedback highlighted that while the practices were not necessarily complicated, they were challenging to fulfil. As one participant explained, sometimes the themes or activities that they were encouraged to engage with challenged them on both personal and practical levels, however, once they came through the process, they often found it very beneficial

Some participants found the mindfulness movement practices challenging, and may have felt self-conscious, others found the movement practices liberating and energising. The same went for the sitting meditation practices — some found this practice more manageable, while others observed themselves getting easily agitated.

While mindfulness workshops are sometimes likened to 'relaxation' classes, relaxation classes cannot be equated to mindfulness. What often tends to happen is that the encouragement of non-judgmental

observation leads to the recognition of states of being such as muscle tension and/or constant racing thoughts, and once these are recognised and attended to, relaxation is induced (Baer et al, 2003; Davis, 2012). Hence, it is possible for mindfulness to lead to relaxation, but it is not the primary reason for the practice.

5.2.3.3 *Time constraints*

Most of the participants highlighted that the nine-week course, with two hourly sessions for eight weeks, as well as the daily homework practice requirements, was too time consuming for their weekly term schedules. Given the daily demands of teaching, teachers noted that as an introductory mindfulness programme they found the homework sessions, in particular, too challenging. Several participants explained that they altered the homework time to suit their personal capacities. Although teachers were able to commit to the duration of the group intervention sessions, overall feedback seemed to correspond with what Ancona and Mendelson (2014) emphasise in their research, that briefer mindfulness interventions (including homework practice sessions) need to be explored for teachers.

5.2.3.4 *Self-regulation*

Overall, teachers remarked on the positive self-regulatory shift the intervention evoked for them, particularly responding to students in the classroom. Participant comments suggest a strong correlation with existing literature (Bishop et al, 2004; Brown & Ryan, 2004; Baer et al, 2006; Kabat-Zinn, 2013) that explains the importance of learning mindfulness practices as a way of regulating attention.

As discussed in Chapter 1, self-regulation is connected to how a person chooses to manage their energy and respond in different situations, and is reliant on the ability to pay attention to the relevant feedback received by that person. The self-regulating effects that the participants spoke of correspond with Kabat-Zinn's (2013) theory, that mindfulness encourages the person to attend to the stimuli the body receives, allowing the body to restore balance, and enable the deliverance of more measured responses as opposed to impulsive reactions. This is highlighted through both overt and covert behaviour. For example, participants found themselves better able to pay attention to the stimuli around them, as well as to the thoughts that arose within. As a consequence they reported that they

became more measured in their behavioural action in the classroom context (overt) as well as of their thoughts (covert). The teachers' ability to pause before responding enabled them to attend to the information that had been received, permitting a free flow of feedback to circulate. This allows the individual parts of the person's system to communicate and interact with each other, and to maintain an overall balance of energy and information flow with the system as a whole (Kabat-Zinn, 2013).

While the system refers primarily to the teachers' personal psycho-physiological system, the effects of the teachers' more measured response system in the classroom would also contribute to the system/s they belong to, suggesting that their interactions with students, colleagues, and others would also be affected by this more regulated response style.

As the literature suggests (Roeser et al, 2013; Peltzer et al, 2009; Schulze & Steyn, 2007; Olivier & Venter, 2003) the teaching profession presents as a highly stressful profession and managing teacher stress ought to be prioritised as a way of supporting teachers in their work. It appears that many participants highlighted the positive impact the intervention, through its self-regulatory effect, had on stress management, and the influence this had on their ability to teach in the classroom and interact with the students.

5.2.3.5 Presence

The theme of presence arose repeatedly as teachers noted how they felt more "present in the moment to the students". This theme can be connected to Rodgers and Raider-Roth's (2006) theory of teacher presence, highlighted in Chapter 1, which advocates that through presence of being, teacher-student connections are enriched. Furthermore, the 'presence' that the teachers spoke of relates to Bishop et al's (2004) model of mindfulness, which explains an *orientation towards experiences* in the present moment. This *orientation towards experiences* allows for an engagement with the present moment, encouraging teachers to attend to the immediate need and learning experience presented by the student. Moreover, teachers spoke of 'presence' as a way of better prioritising tasks and needs in the classroom, as well as enjoying oneself more, and appreciating the essence of the role as an educator.

5.2.3.6 *Non-judgement*

As previously noted, non-judgment was a prominent theme that teachers spoke of, explaining that there was a greater awareness of the critical voice inside their minds. It seemed that through practicing the mindfulness exercises, they developed an awareness of their thoughts and how thoughts have the power to evoke emotions. They spoke of being less critical and judgmental of themselves and their students, as well as encouraging students to be less self-critical of their own self-defeating thoughts. This reiterates what Kabat-Zinn's (2013) theory suggests, that the whole process of paying attention is governed by how we perceive (or do not perceive) things, and how we think about them and represent them to ourselves. Hence, despite this theme not rendering a significant change on the self-reported FFMQ, it was highlighted as a noticeable change discursively.

5.3 LIMITATIONS OF THE CURRENT STUDY

The study ought to be considered within the parameters of the research context. Possible limitations and suggestions for improvement to the study are discussed below.

This research study may have been strengthened given the use of a control group. While the lack of such a group threatens the internal validity of the study, this threat was in part mitigated by the focus group discussion. A control group means that there would be a group controlling for possible external influences. Furthermore, this would allow for an additional data set from which the intervention group results could be compared.

There is a limitation in using self-reported questionnaires as this relies on the participants' interpretation of the questions, as well as the degree to which they rate themselves according to the scale. What some people consider to be 'often true', others may consider to be 'sometimes true'. Self-reporting questionnaires also may be influenced by the way the individual feels on the day, or possibly how the individual wishes me to perceive the outcomes, and hence pre and post outcomes can be skewed based on external influences on the person's mood, and their ability to rate themselves on that particular day, as well as wanting to please me. Given this, including more objective measures, such as physiological or behavioural assessments (for example, cortisol level or observational data),

could be useful in understanding the underlying way in which mindfulness interventions influence the body and mind, and further validate findings (Gouda, 2016).

For this project I emailed senior staff members of 21 schools in Cape Town. The email addresses were collected based on website information, which may present limitations such as incorrect or out-dated website information, the exclusion of schools that do not have efficient websites set up, or emails that simply get lost in inboxes or ignored by recipients. On reflection my recruitment process could be further refined. For example, I could have aimed to set up personal interviews with each school to 'sell' the research project, or followed up telephonically with every school to ensure that the information had been delivered. Due to time constraints this was not possible for this project, and hence the first school to respond positively, was selected. However, it is acknowledged that different recruitment methods could be employed should further research of this nature be explored.

While I made it clear that participants had the freedom to withdraw from the research at any point, statements from the focus group interview suggested possible sentiments of social pressure not to disappoint, both the facilitator as well as me. Hence being part of a research project and group may have possibly motivated participants to complete the course. Furthermore, on the aspect of social dynamics, comments arose that suggested that while some teachers appreciated being part of a familiar group of staff members, others found it slightly awkward both in terms of possible ranks within the school, as well as interpersonally. Hence, for some teachers they may have found it preferable to be part of a group of random staff members from various schools as opposed to a single school context.

Participants all concurred, that given this to be an introductory mindfulness course, they found the homework sessions extremely demanding, and would have preferred the required daily mindfulness practices to have begun more "gently" in the first few weeks of the course. Given this it may be worth the facilitator setting more manageable homework practices, and for example starting with five minute mindfulness meditations and building up each week by an additional five minutes until the 25 minutes mindfulness meditation was reached in week five or six, as opposed to starting with 25 minutes in week one. However, such structural changes to the intervention would require the discretion of a trained facilitator.

5.4 RECOMMENDATIONS

The findings from this research suggest promising outcomes, and therefore this project presents potential for further refinement, research exploration and possibly policy development. Such recommendations can be summarised as follows:

5.4.1 Future research

- Additional studies of this nature, including a variety of different schools based in South Africa, would make the research findings more generalizable in the South African context, strengthening research outcomes.
- A more systematic and thorough recruitment process, may allow for a larger, more representative sample pool of schools.
- A larger sample would further allow for the incorporation of a control group, which would allow for a randomised true experimental design, which would strengthen the validity and reliability of the research.
- Possibly including an objective measure such as cortisol levels, resting heart rate, or blood pressure could be beneficial. Moreover, incorporating a teacher stress inventory and, or a self-regulatory scale may also be useful.
- Structural changes to the intervention's daily homework programme would be encouraged to permit more gradual introduction to practicing mindful meditation for incrementally longer lengths of time at home.
- An additional triangulation technique could include the use of student feedback on teacher mindfulness and behaviour in the classroom.

5.4.2 Policy

- Based on this study's findings, it may be beneficial for schools to employ the services of a trained mindfulness facilitator to explore possible benefits that it may have in supporting teachers in their professional capacity.
- Alternatively, it may be useful for teachers to seek such opportunities in attending mindfulness workshops to better support themselves in the roles they are required to

perform.

- The Institute for Mindfulness and/or the Department of Education might consider utilising this research and its findings to elaborate a larger scale project at provincial or even national level. Should these research findings confirm the positive outcomes that this study has pointed to, it may be useful for the Department of Education to consider incorporate mindfulness courses as part of continuing professional teacher development (CPTD), allowing teachers to receive points upon completion, which would contribute to the 150 points they need to obtain in a three year cycle. This would ultimately promote a culture of self-care and teacher well-being in South Africa.

5.5 OVERALL CONCLUSION

My personal experience of attending a mindfulness workshop, further enticed me to explore the role mindfulness could play in supporting teachers in a school context. The aim of the research was to implement a MBI with a group of teachers and to assess pre and post test results from two self-reported questionnaires, namely the Five Facet Mindfulness Questionnaire and the Compassion Towards Students Scale. Furthermore, the research aimed to uncover feedback from participants in a focus group setting, to ascertain their experience of the intervention. Outcomes from the quantitative data set suggest that teachers experienced an overall significant increase in mindfulness in the classroom; however, a significant increase in compassion towards students was not demonstrated. The qualitative data set, suggests that teachers experienced increases in both mindfulness and compassionate levels in the classroom, although how significant these increases were is not necessarily determined. Furthermore, the qualitative data highlighted pertinent themes such as increased levels of self-regulation, non-judgment, presence of being, and other factors relating to the administration and implementation of the intervention.

These research findings may be aligned with findings from other research studies conducted with the FFMQ (Schussler, Jennings, Sharp & Frank (2016), Frank, Reibel, Broderick, Cantrell & Metz (2015), Beshai, McAlphine, Weare, & Kuyken (2015), Roeser, Schonert-Reichl, Jha, Cullen, Wallace, Wilensky, Oberle, Thomson, Taylor & Harrison (2013), Flook, Goldberg, Pinger, Bonus and Davidson (2013), Jennings, Frank, Snowberg, Coccia, and Greenberg (2013), Jennings, Snowberg, Coccia, and Greenberg (2011)), although some of the outcomes on the subscales may differ. In conclusion, while the results of this study suggest overall positive findings, it would be necessary to conduct further

research of this nature to investigate the effectiveness of mindfulness interventions in supporting teacher well-being.

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APPENDICES

APPENDIX A: STAFF DEVELOPMENT ADVERTISEMENT

STAFF DEVELOPMENT OPPORTUNITY

Mindfulness Training for Teachers Research Project

A research project on 'Mindfulness in South African Schools' is being carried out by a researcher from the Department of Educational Psychology at Stellenbosch University. The researcher's study team is recruiting **twelve (12) qualified teachers in full-time teaching positions** to participate in the study. Participation involves:

1. **attending an 8-week training programme for two hours per week** with XXXX, a professional mindfulness facilitator trained through the Stellenbosch University's Faculty of medicine and Health Sciences, in association with the Institute of Mindfulness in South Africa; as well as,
2. **completing study-related questionnaires.**

What is Mindfulness?

Mindfulness is about paying attention to the present moment in a particular way, with intention, without judgement and with compassion and kindness – not only for others but also for oneself. It is essentially the simple practice of creating moment-to-moment awareness, living each moment fully awake, with an acceptance for things just as they are. At the same time, it is about breaking away from our entrenched habits and patterns of behaviour and embracing a whole new way of living with authenticity.

What does the 8-week training programme consist of?

- Training involves a gradual introduction to a number of basic **Mindfulness** practices that bring awareness to bodily sensations, emotions and thoughts. These include the body scan practices, sitting meditation, walking meditation and “Awareness of Breath” exercises.
- All practices are presented in a particular way that neuroscientific research suggests can heighten activity in the areas of our brain that regulate our attention, and that in turn carry over into our daily lives.
- Over the course of the training, participants are invited to explore their relationship with, and engage with, the foundational attitudes of **Mindfulness**, including ‘beginner’s mind’, non-judgement, acceptance, letting go, non-striving, patience, trust, gratitude and compassion.

Why should I participate?

- **STAYING FOCUSED:** Most teacher training focuses on content and pedagogy, and overlooks the social, emotional, and cognitive demands of teaching. By learning and cultivating **Mindfulness** skills, teachers develop the ability to stay focussed on their present moment experience with non-judgmental awareness. This enables them to promote the calm, relaxed, but enlivened classroom environment so essential to learning.
- **RELATING IN THE SCHOOL ENVIRONMENT:** By consciously training our minds to become more aware of our inner and outer experience, we learn how to manage our emotions: how to transform a reaction into a considered response. Through this process, **Mindfulness** can help teachers to be more effective at reducing conflict and developing more positive ways of relating in the classroom, which in turn may lead to increased job satisfaction.
- **SHOWING COMPASSION TO LEARNERS:** Studies have found that teachers’ performance, such as their behaviour management skills and their emotional and instructional support of students, was altered by Mindfulness training and made them more effective teachers, possibly by buffering them from stressful experiences at school and in their lives in general. This can help to rein in automatic and potentially unhelpful reactions to a situation, instead enabling a kinder and more compassionate response, especially to students who might be difficult or disruptive, and thereby strengthening the teacher-student relationship.
- **SHOWING COMPASSION TO YOURSELF:** Research has also indicated that undertaking a course in mindfulness practice increases participants’ self-compassion. So instead of feeling responsible for a failed lesson, struggling with a challenging student or

saying the wrong thing to a parent, teachers can adopt a sense of understanding, gentleness and compassion for the difficulties that they have to deal with in their work. Practicing non-judgement prevents teachers from labelling events as “good” or “bad,” and forms the first step towards recognising that all teachers face these challenges and that everyone, including oneself, is doing the best they can.

- **REDUCING THE RISK OF BURNOUT:** Studies amongst school teachers who have undertaken **Mindfulness** training indicated numerous benefits, including elevated levels of self-compassion and a decrease in anxiety, depression, and burnout, compared with teachers who were placed on a wait list for the course who actually experienced increased stress and burnout levels.

Training programme dates*

- Session 1: Monday, 25 July 2016 (16h00 to 18h00)
- Session 2: Monday, 1 August 2016 (16h00 to 18h00)
- Session 3: Monday, 15 August 2016 (16h00 to 18h00)
- Session 4: Monday, 22 August 2016 (16h00 to 18h00)
- Session 5: Monday, 29 August 2016 (16h00 to 18h00)
- Session 6: Monday, 5 September 2016 (16h00 to 18h00)
- Session 7: Monday, 12 September 2016 (16h00 to 18h00)
- Session 8: Monday, 19 September 2016 (16h00 to 18h00)

For research-related reasons all those who start the programme must hold a strong intention to complete the programme.

Where will the training take place?

All sessions will take place close to school location, Cape Town.

Places are limited – express your interest today!

Please contact Ms. Claudia Colarossi (claudiacolarossi@gmail.com).

All research is to be conducted with ethical clearance from Stellenbosch University's Ethics Review Board.

About the research team

Mindfulness Training Facilitator: XXX YYY

With a background in research, development and business administration, and training in psychology (counselling and health) and adult education, XXX has a lifelong interest in how we can approach a deeper experience of fulfilment and integration in our lives. XXX has a personal mindfulness practice that goes back to her 20's and has recently completed her Mindfulness facilitator training at Stellenbosch University. She is committed to finding a gentle and compassionate way of being in the world, both for herself and for those with whom she works. Her particular interests are in Mindful Education and Parenting and (as a mountain and wilderness guide) in the interplay between being outdoors in nature and guidance towards integrated, holistic well-being. As a wife and parent of two teenagers, she finds great fulfilment in using Mindfulness practice as a means to ease herself and her family through the challenges and demands of 21st century life.

Researcher: Claudia Colarossi

Claudia holds a postgraduate honours degree in psychology (UCT) and a post-graduate certificate in intermediate education (UNISA). She is currently completing a master's degree in Educational Psychology through Stellenbosch University. Claudia has worked both in the corporate sector as a graduate management trainee in human resources and has taught at a local primary school. As a qualified intermediate teacher, Claudia has developed a keen interest in teacher wellbeing. This coupled with her long-standing interest in mindfulness has led to the development of this research study. Apart from her study commitments, Claudia is a wife and mother of a two-year-old daughter.

APPENDIX B: FIVE FACET MINDFULNESS QUESTIONNAIRE**Five Facet Mindfulness Questionnaire****Description:**

This instrument is based on a factor analytic study of five independently developed mindfulness questionnaires. The analysis yielded five factors that appear to represent elements of mindfulness as it is currently conceptualized. The five facets are observing, describing, acting with awareness, non-judging of inner experience, and non-reactivity to inner experience. More information is available in:

Please rate each of the following statements using the scale provided. Write the number in the blank that best describes your own opinion of what is generally true for you.

1	2	3	4	5
never or very rarely true	rarely true	sometimes true	often true	very often or always true

- _____ 1. When I'm walking, I deliberately notice the sensations of my body moving.
- _____ 2. I'm good at finding words to describe my feelings.
- _____ 3. I criticize myself for having irrational or inappropriate emotions.
- _____ 4. I perceive my feelings and emotions without having to react to them.
- _____ 5. When I do things, my mind wanders off and I'm easily distracted.
- _____ 6. When I take a shower or bath, I stay alert to the sensations of water on my body.
- _____ 7. I can easily put my beliefs, opinions, and expectations into words.
- _____ 8. I don't pay attention to what I'm doing because I'm daydreaming, worrying, or otherwise distracted.
- _____ 9. I watch my feelings without getting lost in them.
- _____ 10. I tell myself I shouldn't be feeling the way I'm feeling.
- _____ 11. I notice how foods and drinks affect my thoughts, bodily sensations, and emotions.
- _____ 12. It's hard for me to find the words to describe what I'm thinking.
- _____ 13. I am easily distracted.
- _____ 14. I believe some of my thoughts are abnormal or bad and I shouldn't think that way.

- _____ 15. I pay attention to sensations, such as the wind in my hair or sun on my face.
- _____ 16. I have trouble thinking of the right words to express how I feel about things
- _____ 17. I make judgments about whether my thoughts are good or bad.
- _____ 18. I find it difficult to stay focused on what's happening in the present.
- _____ 19. When I have distressing thoughts or images, I "step back" and am aware of the thought or image without getting taken over by it.
- _____ 20. I pay attention to sounds, such as clocks ticking, birds chirping, or cars passing.
- _____ 21. In difficult situations, I can pause without immediately reacting.
- _____ 22. When I have a sensation in my body, it's difficult for me to describe it because I can't find the right words.
- _____ 23. It seems I am "running on automatic" without much awareness of what I'm doing.
- _____ 24. When I have distressing thoughts or images, I feel calm soon after.
- _____ 25. I tell myself that I shouldn't be thinking the way I'm thinking.
- _____ 26. I notice the smells and aromas of things.
- _____ 27. Even when I'm feeling terribly upset, I can find a way to put it into words.
- _____ 28. I rush through activities without being really attentive to them.
- _____ 29. When I have distressing thoughts or images I am able just to notice them without reacting.
- _____ 30. I think some of my emotions are bad or inappropriate and I shouldn't feel them.
- _____ 31. I notice visual elements in art or nature, such as colors, shapes, textures, or patterns of light and shadow.
- _____ 32. My natural tendency is to put my experiences into words.
- _____ 33. When I have distressing thoughts or images, I just notice them and let them go.
- _____ 34. I do jobs or tasks automatically without being aware of what I'm doing.
- _____ 35. When I have distressing thoughts or images, I judge myself as good or bad, depending what the thought/image is about.
- _____ 36. I pay attention to how my emotions affect my thoughts and behavior.
- _____ 37. I can usually describe how I feel at the moment in considerable detail.
- _____ 38. I find myself doing things without paying attention.
- _____ 39. I disapprove of myself when I have irrational ideas.

APPENDIX C: COMPASSION TOWARDS STUDENTS SCALE**Compassion Scale****HOW I TYPICALLY ACT TOWARDS STUDENTS**

Please read each statement carefully before answering. To the left of each item, indicate how often you behave in the stated manner, using the following scale:

**Almost
Never**

**Almost
Always**

1

2

3

4

5

- ____ 1. When students cry in front of me, I often don't feel anything at all.
- ____ 2. Sometimes when students talk about their problems, I feel like I don't care.
- ____ 3. I don't feel emotionally connected to students in pain.
- ____ 4. I pay careful attention when other students talk to me.
- ____ 5. I feel detached from students when they tell me their tales of woe.
- ____ 6. If I see a student going through a difficult time, I try to be caring toward that person.
- ____ 7. I often tune out when students tell me about their troubles.
- ____ 8. I like to be there for students in times of difficulty.
- ____ 9. I notice when students are upset, even if they don't say anything.
- ____ 10. When I see a student feeling down, I feel like I can't relate to them.
- ____ 11. Everyone feels down sometimes, it is part of being human.
- ____ 12. Sometimes I am cold to students when they are down and out.
- ____ 13. I tend to listen patiently when students tell me their problems.
- ____ 14. I don't concern myself with students' problems.
- ____ 15. It's important to recognize that all people have weaknesses and no one's perfect.
- ____ 16. My heart goes out to students who are unhappy.
- ____ 17. Despite my differences with students, I know that everyone feels pain just like me.
- ____ 18. When students feel troubled, I usually let someone else attend to them.

- ____ 19. I don't think much about the concerns of students.
- ____ 20. Suffering is just a part of the common human experience.
- ____ 21. When students tell me about their problems, I try to keep a balanced perspective on the situation.
- ____ 22. I can't really connect with other students when they're suffering.
- ____ 23. I try to avoid students who are experiencing a lot of pain.
- ____ 24. When students feel sadness, I try to comfort them.

This questionnaire has been adapted from The Compassion For Others Scale developed by Pommier, E. A. (2011). The Compassion Scale is available on the Dr Neff's Self-Compassion website (<http://self-compassion.org/self-compassion-scales-for-researchers/>).

APPENDIX D: FOCUS GROUP DISCUSSION QUESTIONS

Focus group discussion questions

Time: 45 – 60 minutes

Audio recorded

The group discussion will be semi-structured. The questions below will guide the discussion. The researcher will pose the questions and facilitate the discussion.

1. Can you describe your general impressions of the training?
2. What aspects did you find challenging?
3. What aspects did you find easy?
4. Can you describe some of the ways in which the tools or techniques that you've learnt have influenced your teaching?
5. How might the mindfulness practices you've learnt support you as a teacher?
6. Can you describe, if at all, whether the ways in which you relate to your students has changed since your participation in the programme?
7. Were there any external factors, unrelated to the mindfulness programme that significantly impacted your participation?
8. What relevance did the questionnaires hold for you?
9. What went through your mind when completing the questionnaires, both before the programme commenced and then again after the programme?
10. Would you recommend this programme to other teachers? Please give reasons for your answers.

APPENDIX E: FACILITATOR AGREEMENT



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FACILITATOR AGREEMENT

RESEARCH TITLE

Exploring the role of mindfulness in supporting teachers in a South African school.

1. AGREEMENT TO PARTICIPATE IN THE RESEARCH STUDY

You, the Facilitator, agree to participate in a research study conducted by Claudia Colarossi, an M.Ed student in the Department of Educational Psychology at Stellenbosch University, the Investigator, the results of which will contribute to a mini-dissertation.

Your role is limited to providing an 8-week programme of Mindfulness-based Awareness (MBA) sessions ('the programme').

2. PURPOSE OF THE STUDY

There is an absence of research evidence pertaining to MBA with teachers in the South African context. As such, this research aims to develop a MBA intervention programme with a group of school teachers based in Cape Town in the Western Cape of South Africa. Using an exploratory, mixed

methodological approach, this research project deploys a trained and certified mindfulness practitioner to apply the MBA intervention. The first purpose is to determine whether the intervention will have a statistically significant impact on levels of teacher mindfulness and teacher compassion toward learners. The second purpose of the research is to capture how the participants experience the MBA programme. The research study aims to modestly contribute to the knowledge base of mindfulness and education in South Africa and serves as a preliminary study that can be developed further.

3. ETHICAL PROCEDURES

As a voluntary Facilitator for the MBA programme that is being administered as part of the research project to be undertaken by the Investigator, you, the Facilitator, are asked to adhere to the ethical procedures of the research process in the following manner:

1. To respect the autonomy of all participants by recognising his/her freedom to withdraw from the programme at any stage.
2. To maintain confidentiality and to respect the privacy of all participants.
3. To work in collaboration with the Investigator specifically with regards to the effective management of course logistics and participation, such as planning for dates and times of sessions, and to ensure punctual attendance at all agreed sessions.
4. To provide the best possible service to participants, in line with your qualification, with the aim of increasing their knowledge and awareness of mindfulness practices as these relate to professional employment as teachers.
5. To avoid harm to participants at all stages of the programme.
6. To keep a referral list available at each session of psycho-social support providers, and to be able to provide the relevant details to a participant should she/he require further support from a provider.

4. CONFIDENTIALITY

Your name will not be attached to any of the data recording instruments. The data collected will be kept safely in possession of the researcher. The researcher, the supervisor of the research project, and a statistician will have access to the raw data.

Should the results of the study be published, anonymity will be maintained.

5. IDENTIFICATION OF INVESTIGATORS

If you have any questions or concerns about the research, please feel free to contact:

- **Principal Investigator**: Ms Claudia Colarossi, mobile 0825503456
- **Supervisor**: Dr Lorna Dreyer, telephone 021 808 3502

6. RIGHTS OF RESEARCH SUBJECTS AND FACILITATORS

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, contact Ms Maléne Fouché [mfouche@sun.ac.za; 021 808 4622] at the Division for Research Development.

SIGNATURE OF FACILITATOR AND INVESTIGATOR

The information above was described to me by Claudia Colarossi in English and I am in command of this language.

I was given the opportunity to ask questions and these questions were answered to my satisfaction.

I hereby consent voluntarily to participate in this study. I have been given a copy of this form.

Name of Facilitator

Signature of Facilitator

Date

SIGNATURE OF INVESTIGATOR

I declare that I explained the information given in this document to _____. *[He/she]* was encouraged and given ample time to ask me any questions. This conversation was conducted in English.

Signature of Investigator

Date

APPENDIX F: PARTICIPANT CONSENT FORM



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CONSENT TO PARTICIPATE IN RESEARCH

RESEARCH TITLE

Exploring the role of mindfulness in supporting teachers in a South African school.

You are asked to participate in a research study conducted by Claudia Colarossi, an M.Ed student in the Department of Educational Psychology at Stellenbosch University. The results will contribute to a mini-dissertation. You were selected as a possible participant in this study because you hold a teaching qualification, are employed on a full-time basis, and have expressed an interest in participating in this research.

1. PURPOSE OF THE STUDY

There is an absence of research evidence pertaining to Mindfulness-based Awareness (MBA) with teachers in the South African context. As such, this research aims to develop a MBA intervention programme with a group of school teachers based in Cape Town in the Western Cape of South Africa. Using an exploratory, mixed methodological approach, this research project deploys a trained and certified mindfulness practitioner to apply the MBA intervention. The first purpose is to determine whether the intervention will have a statistically significant impact on levels of teacher mindfulness and

teacher compassion toward learners. The second purpose of the research is to capture how the participants experience the MBA programme. The research study aims to modestly contribute to the knowledge base of mindfulness and education in South Africa and serves as a preliminary study that can be developed further.

2. PROCEDURES

If you volunteer to participate in this study, we would ask you to do the following things:

1. Attend and participate in an eight-week mindfulness training programme for two hours per week with XXX YYY, a professional mindfulness facilitator trained through the Stellenbosch University Institute of Mindfulness South Africa. **Venue:** ZZZ School, Cape Town;
2. Complete study-related questionnaires. In particular, you will be asked to complete questionnaires relating to both mindfulness and compassion towards learners. The Five Facet Mindfulness Questionnaire (Baer et al., 2006) with 39 items, measures situational elements of mindfulness on a 1-5 Likert scale. The Compassion Towards Learners questionnaire will be based on Pommier's (2011) Compassion For Others questionnaire, with 24 items measured on a 1-5 Likert scale. These questionnaires will be administered before (pretest) and after (posttest) the programme. **Venue:** ZZZ School, Cape Town;
3. Participate in a **one-hour** focus group at the end of the course to provide personal feedback of your experiences of the programme. **Venue:** ZZZ School, Cape Town.

3. POTENTIAL RISKS AND DISCOMFORTS

Before the formal commencement of the programme, you will be given the opportunity to share with the facilitator any personal or emotional issues that you are experiencing, which may impact on your experience of the programme. You will be invited to meet with the facilitator for 10 minutes to debrief her on what significant issues or emotions you bring with you into the programme space. While the facilitator engages participants sensitively, this debrief further allows the facilitator to prepare adequately for the emotional space that the participants present.

While the mindfulness programme is not a form of therapy, the nature of the awareness activities may provide inner space for deeper emotional issues to arise that you may wish to explore further. Should you require additional support a list of both public and private mental health care service providers please see the table below.

4. POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

Potential benefits to society

This study is based on two recurring issues highlighted in existing research. First, teachers in South Africa experience high levels of stress and strain. Second, many teachers find it a challenge to promote and advance inclusive education practices in the schools in which they work. These issues need to be addressed. Mindfulness-based practices have been tested in a number of countries as a means to promoting teacher wellbeing. However, there is as yet no research evidence that explores the effectiveness of mindfulness-based approaches within educational environments in South Africa. This research explores mindfulness-based practices as a tool to support teachers: first, to promote teacher mindfulness as a means to enhance wellbeing, and second, to facilitate the shift towards non-judgmental and compassionate attitudes towards all learners.

Potential benefits to subjects

The mindfulness programme aims to promote and enhance the following life skills:

- Attentiveness
- Reducing the risk of burnout
- Relating to others in the school environment
- Showing compassion to learners
- Showing compassion to yourself
- Exploring attitudes of non-judgement, acceptance, letting go, non-striving, patience, trust, gratitude and compassion.

5. PAYMENT FOR PARTICIPATION

There will be no form of remuneration to the volunteer participants of this research.

6. CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained by means of anonymity in all aspects of the research process. Your name will not be attached to any of the data recording instruments. The data collected will be kept safely in possession of the researcher. The researcher, the supervisor of the research project, a statistician and transcriber will have access to raw data.

The focus group discussion will be audio recorded. This recording will be available to all participants of the study on request, for one month after the focus group discussion. Once the mini dissertation has been submitted and evaluated, the material will be erased.

Should the results of the study be published, anonymity will be maintained.

7. PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you don't want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so. These circumstances might include failure to attend two or more of the training sessions.

8. IDENTIFICATION OF INVESTIGATORS

If you have any questions or concerns about the research, please feel free to contact:

- **Principal Investigator:** Ms Claudia Colarossi, mobile 0825503456
- **Supervisor:** Dr Lorna Dreyer, telephone 021 808 3502

9. RIGHTS OF RESEARCH SUBJECTS

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, contact Ms Maléne Fouché [mfouche@sun.ac.za; 021 808 4622] at the Division for Research Development.

SIGNATURE OF RESEARCH SUBJECT OR LEGAL REPRESENTATIVE
--

The information above was described to me by Claudia Colarossi in English and I am in command of this language.

I was given the opportunity to ask questions and these questions were answered to my satisfaction.

I hereby consent voluntarily to participate in this study. I have been given a copy of this form.

Name of Subject/Participant

Signature of Subject/Participant or Legal Representative

Date

SIGNATURE OF INVESTIGATOR

I declare that I explained the information given in this document to _____ . *[He/she]* was encouraged and given ample time to ask me any questions. This conversation was conducted in English.

Signature of Investigator

Date

APPENDIX G: INFORMATION SHEET



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INFORMATION SHEET

RESEARCH TITLE

Exploring the role of mindfulness in supporting teachers in a South African school.

You are asked to participate in a research study conducted by Claudia Colarossi, an M.Ed student in the Department of Educational Psychology at Stellenbosch University. The results will contribute to a mini-dissertation. You were selected as a possible participant in this study because you hold a teaching qualification, are employed on a full-time basis, and have expressed an interest in participating in this research.

10. PURPOSE OF THE STUDY

There is an absence of research evidence pertaining to Mindfulness-based Awareness (MBA) with teachers in the South African context. As such, this research aims to develop a MBA intervention programme with a group of school teachers based in Cape Town in the Western Cape of South Africa. Using an exploratory, mixed methodological approach, this research project deploys a trained and certified mindfulness practitioner to apply the MBA intervention. The first purpose is to determine whether the intervention will have a statistically significant impact on levels of teacher mindfulness and teacher compassion toward learners. The second purpose of the research is to capture how the participants experience the MBA programme. The

research study aims to modestly contribute to the knowledge base of mindfulness and education in South Africa and serves as a preliminary study that can be developed further.

11. PROCEDURES

If you volunteer to participate in this study, we would ask you to do the following things:

1. Attend and participate in an eight-week mindfulness training programme for two hours per week with XXX YYY, a professional mindfulness facilitator trained through the Stellenbosch University Institute of Mindfulness South Africa. **Venue:** ZZZ School, Cape Town;
2. Complete study-related questionnaires. In particular, you will be asked to complete questionnaires relating to both mindfulness and compassion towards learners. The Five Facet Mindfulness Questionnaire (Baer et al., 2006) with 39 items, measures situational elements of mindfulness on a 1-5 Likert scale. The Compassion Towards Learners questionnaire will be based on Pommier's (2011) Compassion For Others questionnaire, with 24 items measured on a 1-5 Likert scale. These questionnaires will be administered before (pretest) and after (posttest) the programme. **Venue:** ZZZ School, Cape Town;
3. Participate in a **one-hour** focus group at the end of the course to provide personal feedback of your experiences of the programme. **Venue:** ZZZ School, Cape Town.

12. POTENTIAL RISKS AND DISCOMFORTS

Before the formal commencement of the programme, you will be given the opportunity to share with the facilitator any personal or emotional issues that you are experiencing, which may impact on your experience of the programme. You will be invited to meet with the facilitator for 10 minutes to debrief her on what significant issues or emotions you bring with you into the programme space. While the facilitator engages participants sensitively, this debrief further allows the facilitator to prepare adequately for the emotional space that the participants present. While the mindfulness programme is not

a form of therapy, the nature of the awareness activities may provide inner space for deeper emotional issues to arise that you may wish to explore further. Should you require additional support a list of both public and private mental health care service providers please see the table below.

Service provider	Form of assistance	Contact details
Lifeline	Counselling. Face-to-face or telephonic	Telephone: 021-461 1113 Website: http://www.lifelinewc.org.za
Sue Cooper	Clinical psychologist	Email: sue.stillmind@gmail.com Website: http://www.suecooper.co.za
Sarah Foale	Mindfulness facilitator	Email: sarah@sarahfoale.co.za Mobile: 082 6507659 Website: http://www.sarahfoale.co.za
Ms Catherine Radloff	Educational psychologist	Email: info@cathradloff.com Mobile: 0833793595 Website: http://www.cathradloff.com
Mr Jamie Elkon	Clinical Psychologist and Life Coach	Email: Jamie.elkon@gmail.com Mobile: 0825500750
FAMSA	Counselling	Telephone: 0214477951 Website: http://www.famsawc.org.za

13. POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

Potential benefits to society

This study is based on two recurring issues highlighted in existing research. First, teachers in South Africa experience high levels of stress and strain. Second, many teachers find it a challenge to promote and advance inclusive education practices in the schools in which they work. These issues need to

be addressed. Mindfulness-based practices have been tested in a number of countries as a means to promoting teacher wellbeing. However, there is as yet no research evidence that explores the effectiveness of mindfulness-based approaches within educational environments in South Africa. This research explores mindfulness-based practices as a tool to support teachers: first, to promote teacher mindfulness as a means to enhance wellbeing, and second, to facilitate the shift towards non-judgmental and compassionate attitudes towards all learners.

Potential benefits to subjects

The mindfulness programme aims to promote and enhance the following life skills:

- Attentiveness
- Reducing the risk of burnout
- Relating to others in the school environment
- Showing compassion to learners
- Showing compassion to yourself
- Exploring attitudes of non-judgement, acceptance, letting go, non-striving, patience, trust, gratitude and compassion.

14. PAYMENT FOR PARTICIPATION

There will be no form of remuneration to the volunteer participants of this research.

15. CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained by means of anonymity in all aspects of the research process. Your name will not be attached to any of the data recording instruments. The data collected will be kept safely in possession of the researcher. The researcher, the supervisor of the research project, a statistician and transcriber will have access to raw data.

The focus group discussion will be audio recorded. This recording will be available to all participants of the study on request, for one month after the focus group discussion. Once the mini dissertation has been submitted and evaluated, the material will be erased.

Should the results of the study be published, anonymity will be maintained.

16. PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you don't want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so. These circumstances might include failure to attend two or more of the training sessions.

17. IDENTIFICATION OF INVESTIGATORS

If you have any questions or concerns about the research, please feel free to contact:

- **Principal Investigator**: Ms Claudia Colarossi, mobile 0825503456
- **Supervisor**: Dr Lorna Dreyer, telephone 021 808 3502

18. RIGHTS OF RESEARCH SUBJECTS

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, contact Ms Maléne Fouché [mfouche@sun.ac.za; 021 808 4622] at the Division for Research Development.

APPENDIX H: MINDFULNESS STUDIES

No.	Year	Authors/Country/Title of Study	Study purpose	Design and Sample	Intervention type and duration	Measures	Findings & Concluding Remarks
1	2016	Gouda Luong, Schmidt, & Bauer (Germany) Students and Teachers Benefit from Mindfulness-Based Stress Reduction in a School-Embedded Pilot Study	Evaluate the effectiveness of a school-embedded mindfulness-based intervention for both students and teachers.	Randomised Control Trial N = 29 Experimental (n=14) Control (n=15) Sample of students and teachers ¹¹ from a Catholic Gymnasium for Girls	MBSR • Total: 8 weeks 2 hour sessions/week additional full day session	<ul style="list-style-type: none"> • Freiburg Mindfulness Inventory • Perceived Stress Questionnaire • Hospital Anxiety and Depression Scale (German version) • Test Anxiety Inventory • Teacher Self-Efficacy (SES-T) • Self-Regulation Scale (SRS) • Emotion Regulation Skills Questionnaire (ERSQ) • German version of the Inventory of Interpersonal Problems (IIP-D) • Openness to Experience Scale of the German Version of the NEO Five-Factor Inventory (NEO-FFI) • Test for Creative Thinking-Drawing Production (TSD-DP) • Utrecht Work Engagement Scale 	<p>Teachers in the intervention group showed significantly higher self-reported mindfulness levels and reduced interpersonal problems compared to the control group, with medium effect sizes on anxiety and emotion regulation.</p> <p>Post-data analysis discussion concluded the following: "In general, all outcome variables, with the exception of engagement and creativity, changed in the hypothesised direction, and may well yield significant results in a larger sample" (p.11).</p>

¹¹ Only the teacher aspect of the study has been accounted for given the focus of this research project.

2	2015	<p>Frank, Reibel, Broderick, Cantrell & Metz (United States)</p> <p>The Effectiveness of Mindfulness-Based Stress Reduction on Educator Stress and Well-Being: Results from a Pilot Study</p>	<p>Assess the effectiveness of an adapted mindfulness-based stress reduction (MBSR) programme on educator stress and well-being.</p>	<p>Pre-Post Test comparison group design</p> <p>N=36 Treatment (n=18) Comparison (n=18)</p> <p>Sample of high school teachers</p>	<p>Adapted MBSR programme</p> <p>Total: 8 weeks 2hr sessions/week 25-30min/day for 6days a week</p>	<ul style="list-style-type: none"> • Brief Symptom Inventory (BSI) • Pittsburgh Sleep Quality Index (PSQI) • Self-compassion Scale (SCS) • Maslach Burnout Inventory (MBI-Educator's Version) • The Five Facet Mindfulness Questionnaire (FFMQ) • The 14-item Affective Self - Regulatory Efficacy Scale (ASRES) 	<p>Efficacy in acknowledgement (p=0.03), calmness, (p = 0.02), and present moment (p = 0.01).</p> <p>Self-compassion revealed several significant and meaningful improvements in self-kindness (p = 0.03), mindfulness (p = 0.01), over-identification (p = 0.01), and total self-compassion (p = 0.01),</p> <p>FFMQ, participants in the treatment group demonstrated significant improvements in their reported levels of observation (p=0.01), awareness (p = 0.03), nonjudgment (p = 0.01), and nonreaction (p = 0.01).</p> <p>Measures of sleep quality, several significant and very large effects were found. Specifically, teachers in the treatment group reported significant improvements in their duration of sleep disturbance (p = 0.01), latency to fall asleep (p = -4.87), daytime dysfunction due to sleep problems (p = 0.01), and overall sleep quality (p = 0.01). Finally, total sleep quality scores significantly improved for treatment group participants (p = 0.01).</p> <p>Note: 100 % of participants in the treatment group who were taking medication to help sleep at night discontinued this practice by the end of the intervention.</p>
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3	2015	<p>Beshai, McAlphine, Weare, & Kuyken (United Kingdom)</p> <p>A Non-Randomised Feasibility Trial Assessing the Efficacy of a Mindfulness-Based Intervention for Teachers to Reduce Stress and Improve Well-Being</p>	<p>The study examined the preliminary efficacy, possible mechanism and acceptability of the mindfulness training intervention customised for teachers and intended to reduce stress and promote well-being in the school system.</p>	<p>Quasi-experimental, non-randomly allocated (i.e. self-selected) groups.</p> <p>N = 89 Intervention (n=49) Comparison (n= 40)</p> <p>Sample of secondary school teachers</p>	<p>b Foundations Course</p> <p>Total = 8 weeks. Sessions: 9 sessions (including presentation session and eight further sessions that were 75 min in duration)</p>	<ul style="list-style-type: none"> • Perceived Stress Scale (PSS) • Warwick-Edinburgh Mental Well-being Scale (WEMWBS) • Five Facet Mindfulness Questionnaire (FFMQ) • Subscales 'self-judgment' and 'self-kindness' from Neff Self-Compassion Scale (SCS) • Two post-test questions on acceptability of the programme, using a five-point Likert-type scale. 	<p>Teachers and staff in the intervention condition reported significant reduction in their stress at post-intervention compared with individuals in the comparison condition.</p> <p>Higher well-being scores at post-intervention in comparison to those in the comparison condition.</p> <p>Significant increases in mindfulness and self-compassion among teachers who took part in the intervention condition in comparison to participants in the comparison group.</p> <p>The majority (95 %) of teachers who attended the course found it to be acceptable.</p> <p>These results indicate that a customised mindfulness-based programme for teachers is a promising approach to reducing stress and increasing well-being, mindfulness, and self-compassion among secondary school teachers (p.1).</p>
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4	2014	Ancona & Mendelson (United States) Feasibility and preliminary outcomes of a yoga and mindfulness intervention for school teachers	Explore the effectiveness of a mindfulness and yoga programme as a means to empower teachers, through self-regulation techniques to better stress-manage and face occupation challenges. (Pilot study)	Randomised Control Design N = 43 teachers Experimental (n = 21) Control (n = 22)	Mindfulness and yoga programme designed by Holsitic Life Foundation <ul style="list-style-type: none"> • Total: 3 weeks • 2 sessions per week (hours not included) 	<ul style="list-style-type: none"> • Teacher Stress Inventory • Maslach Burnout Inventory-Educators Survey • 6 teachers randomly selected for qualitative interview feedback 	Intervention participants showed a pattern of larger reductions in perceived stress and emotional exhaustion. The programme may hold potential for reducing perceived stress and emotional exhaustion.
5	2013	Roeser, Schonert-Reichl, Jha, Cullen, Wallace, Wilensky, Oberle, Thomson, Taylor, & Harrison (United States) Mindfulness Training and Reductions in Teacher Stress and Burnout: Results from two randomized, waitlist-control field trials	Examine whether or not a mindfulness intervention, that aims to teach teachers mindfulness and self-compassion as resources for coping with work-place stress, is acceptable, feasible, and efficacious in this regard.	Randomised Control Experiment <ul style="list-style-type: none"> • Canada Study Intervention (n=29) Waitlist Control (n=32) • USA Intervention (n=28) Waitlist Control (n=27) <p>Sample consisted of elementary and secondary school teachers</p>	Mindfulness Training Intervention <ul style="list-style-type: none"> • Total: 8 weeks • 11 sessions • 36 contact hours 	<ul style="list-style-type: none"> • Five Facet Mindfulness Questionnaire (FFMQ) • Focus and Working memory Capacity (Ospas) • Occupational Self-compassion • Occupational Stress (Teacher Stress Inventory) • Occupational Burnout (Maslach Burnout Inventory) • Symptoms of anxiety and depression (State-Trait Anxiety Inventory and Beck Depression Inventory) • Teacher absenteeism • Physiological indicators • Salivary cortisol home stress kit • Blood pressure • Resting heart rate 	Outcomes of the studies suggested that mindfulness training is feasible and efficacious and that through the skills of mindfulness and a self-compassionate mindset (reduction in self-judgement and self-criticism, as well as increase in self-acceptance and self-kindness) teachers are able to better manage stress and cope with the job demands.

6	2013	Flook, Goldberg, Pinger, Bonus and Davidson (United States) Mindfulness for teachers: A pilot study to assess effects on stress, burnout and teaching efficacy	Adapt MBSR for teachers. Conduct a preliminary evaluation by assessing outcomes across variety of self-report and objective measures that may be impacted by mindfulness training	Randomised controlled design N=18 Experimental (n = 10) Control (n = 8) Sample of elementary school teachers from different public elementary schools	MBSR <ul style="list-style-type: none"> • Total: 8 weeks • 2.5 hr sessions /week • Addition al one 6 hour day-long immersion, • 45 minutes a day/6 days a week practicing methods learnt in class 	<ul style="list-style-type: none"> • Symptom Checklist-90-R, • Five Facet Mindfulness Questionnaire (FFMQ) • Self-Compassion Scale • Maslach Burnout Inventory-Educators Survey • Classroom Assessment Scoring System (CLASS) • Cortisol testing based on saliva samples, • Cambridge Neuropsychological Test Automated Battery (CANTAB, 1999) • Rapid Visual Information Processing Task • Affective Go/No-Go • Weekly practice logs 	<p>Intervention group</p> <ul style="list-style-type: none"> • Significant improvement on several self-report measures including decreases in psychological symptoms ($p = .005$), • Increase on the mindfulness FFMQ describe subscale ($p = .032$) • Self- compassion humanity subscale ($p = .008$), • Decreases in burnout ($p = .038$) • Improved in observer-rated room behavior (CLASS classroom organization: ($p = .046$) • Affective attentional bias ($p = .012$) <p>Control Group</p> <ul style="list-style-type: none"> • Significant decrease in morning cortisol ($p = .048$). • A marginally significant increase in burnout ($p = .051$) <p>Summary</p> <p>This pilot study suggests that a mindfulness intervention adapted for educators boosts aspects of teachers' mindfulness and self-compassion, reduces psychological symptoms and burnout, increases effective teaching behavior, and reduces attentional biases.</p>
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7	2013	<p>Jennings, Frank, Snowberg, Coccia, and Greenberg (United States)</p> <p>Improving Classroom Learning Environments by Cultivating Awareness and Resilience in Education (CARE): Results of a Randomized Controlled Trial</p>	<p>To examine whether the Cultivating Awareness and Resilience in Education (CARE) professional development program could improve teachers' social-emotional competence (SEC) and well-being</p>	<p>Randomised Control Trial Two cohorts</p> <p>N = 53</p> <p>Division of participants is not specified, apart from attrition of 1 from control group and two from experiential group</p>	<p>CARE programme</p> <ul style="list-style-type: none"> • Total: 4-6 weeks • 5 full day sessions • (total of 30 hours). • Intersession coaching via telephone or internet. Booster session about two months later. 	<ul style="list-style-type: none"> • Positive and Negative Affect Schedule (PANAS) • Emotion Regulation Questionnaire • The Center for Epidemiologic Studies Depression Scale • The Daily Physical Symptoms (DPS) • Teachers' Sense of Efficacy Questionnaire (TSES) • Maslach Burnout Inventory (Educators' Survey)(MBI) • The Time Urgency Scale (TUS) • Five Facet Mindfulness Questionnaire (FFMQ) • CARE Acceptability Questionnaire (CAQ) 	<p>Improvements in the re-appraisal subscale of the ERQ and daily physical symptoms compared with controls.</p> <p>Significant reduction in teachers' reports of daily physical symptoms</p> <p>Significant intervention effects were also found on the instructional strategies and student engagement subscales of the TSES</p> <p>With regard to burnout and time pressure, significant intervention effects were found on the general hurry subscale of the TUS and the personal accomplishment subscale of the MBI.</p> <p>CARE teachers showed significant improvement on the observing and nonreacting subscales of the FFMQ.</p> <p>Program satisfaction survey suggests that teachers found the programme improved their relationships with their students, their classroom management, and their classroom climate.</p> <p>The results suggest that CARE had significant positive effects on teachers' general well-being, efficacy, burnout/time pressure, and mindfulness. With regard to measures of general well-being, CARE participants showed statistically significant.</p>
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8	2012	<p>Kemeny, Foltz, Cullen, Jennings, Gillath, Wallace, Cavanagh, Giese-Davis, Rosenberg, Ekman, Shaver. (United States)</p> <p>Contemplative/Emotion Training Reduces Negative Emotional Behavior and Promotes Prosocial Responses</p>	<p>Reduce “destructive enactment of emotions” and enhance prosocial responses</p>	<p>Randomised Control Trial N=82 Experimental (n=41) Control (n=41)</p> <p>Results based on N=76 due to three dropouts in both experimental and control group Experimental (n=38) Control (n=38)</p>	<p>Meditation/emotion regulation training intervention</p> <ul style="list-style-type: none"> • Total: 8 weeks intensive • 42 hrs 	<ul style="list-style-type: none"> • <i>Self-reported Measures</i> • Beck Depression Inventory • Trait Anxiety Inventory • PANAS Negative Affect and Positive Affect Scales • Mindful Attention Awareness Scale • Rumination subscale from the Rumination and Reflection Questionnaire • Marlowe Crowne (short version) • Social Desirability scale (baseline only) • weekly online logs • <i>Experimental tasks to capture changes in emotional behavior:</i> • Micro-Expression Training Tool (METT) • 18-min Trier Social Stress Test (TSST) • Autonomic nervous system (ANS) measurements • Biopac MP150 amplifiers and leads. • Blood pressure (BP) measures Medwave Vasotrac APM205A • Respiratory sinus arrhythmia (RSA) • The electrocardio- graph (ECG) • Computerized lexical decision procedure • Marital Interaction Task 	<p>The experimental group reported reduced trait negative affect, rumination, depression, and anxiety, and increased trait positive affect and mindfulness compared to the control group.</p> <p>Comparison of the training and wait-list control groups during the <i>recovery</i> phase of the Trier Social Stress Test of psychophysiological variables with post hoc tests demonstrating a significant difference at the post time point, but not at follow-up.</p> <p>Negative affect was significantly reduced in those who received the training, and the effects were maintained 5 months after completion of the training programme.</p> <p>Similarly, self-reported trait anxiety, and overall trait negative affect, decreased significantly in the training group compared with controls.</p> <p>Significant gains in mindfulness and trait positive affect</p> <p>Hostile behavior was significantly less likely in the training group than in the control group at posttest</p>
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9	2011	Jennings, Snowberg, Coccia, and Greenberg (United States) Improving Classroom Learning Environments by Cultivating Awareness and Resilience in Education (CARE): Results of Two Pilot Studies	Examine whether a professional development intervention can improve social-emotional skills and well-being and consequently improve teachers' ability to develop and maintain a well-managed learning environment and provide optimal emotional and instructional support to their students.	Randomised Control Trial (Quasi Experimental) Study 1 (n=31) Study 2 (n=43) Study 1 Intervention (n=16) Control (n=15) Study 2 Intervention (n=16 + 5 mentors) Control (n=16 + 6 mentors) Participants completed an additional questionnaire and participated in a focus group to assess the teachers' perceptions of programme satisfaction, feasibility, and effectiveness. Sample: teachers working in a high-poverty urban setting (Study 1) and student teachers and some of their mentors working in a semi-rural/suburban	CARE • 5 full day sessions (total of 30 hours). • Intervention coaching via telephone or internet. • Booster session about two months later.	<ul style="list-style-type: none"> • Positive and Negative Affect Schedule (PANAS) • The Center for Epidemiologic Studies Depression Scale • The Daily Physical Symptoms (DPS) • Teachers' Sense of Efficacy Questionnaire (TSES) • Maslach Burnout Inventory (Educators' Survey)(MBI) • The Time Urgency Scale (TUS) • Five Facet Mindfulness Questionnaire (FFMQ) • The Interpersonal Mindfulness in Teaching Questionnaire (IMT). • Classroom Assessment Scoring System (CLASS) CARE Acceptability Questionnaire (CAQ)	<p>Urban educators showed significant pre-post improvements in mindfulness and time urgency</p> <p>Two dimensions of time urgency (task-related hurry and general hurry) showed significant ($p < .10$) pre-post improvement in this sample, suggesting that teachers felt reduced stress associated with time demands.</p> <p>Significant ($p < .10$) improvement at post-test for the five facets of the Five Facet Mindfulness Questionnaire, and the Interpersonal Mindfulness in Teaching (IMT) scores improved at post-test with an effect size of $d = .48$.</p> <p>Highly satisfied with the programme and found it helpful in improving their classroom management and relationships with students.</p> <p>Qualitative data suggests that the programme results in such improvements that may also contribute to teachers' abilities to provide organizational, instructional, and emotional support to their students (Jennings, 2011).</p>
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10	2011	<p>Mañas, Franco, & Martínez (Spain)</p> <p>Reducing Levels of Teacher Stress and the Days of Sick Leave in Secondary School teachers through a Mindfulness Training Programme</p> <p>* Only the abstract and summary of the article are provided in English, hence only these were used.</p>	Examine the efficacy of a mindfulness training programme to reduce the levels of teacher stress and the days of sick leave taken by a group of teachers	<p>Randomised control trial</p> <p>N = 31 Experimental (n = 16) Control (n = 15)</p> <p>Sample Secondary School teachers</p>	<p>Flow Meditation Programme</p> <ul style="list-style-type: none"> • Total: 10 weeks • 1.5hr sessions/ week, 40 minute practices for every day during the 10-week programme 	<ul style="list-style-type: none"> • Teacher Stress Scale (ED-6) • Number of days taken for sick leave over a year period 2008/2009 was compared with the year period 2009/2010. 	Significant reduction in levels of teacher stress and number of days sick-leave, as well as in three dimensions of the ED-6 (pressure, demotivation, and coping poorly)
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11	2010	<p>Franco, Manas, Cangas, Moreno, & Gallego (Spain)</p> <p>Reducing Teachers' Psychological Distress through a Mindfulness Training Program</p>	<p>Examine the efficacy of a mindfulness training programme to reduce psychological distress in a group of teachers</p>	<p>Random Control Experiment (Control for sex when assigning)</p> <p>N = 68</p> <p>Experimental (n = 34) Control (n = 34)</p> <p>Sample of secondary school teachers</p>	<p>Flow Meditative programme</p> <ul style="list-style-type: none"> • Total: 10 weeks • 1.5hr sessions/ week • 40 minute practices for every day during the 10-week programme • 	<ul style="list-style-type: none"> • Symptom Checklist-90-R (SCL-90-R) 	<p>Significant decrease in observed levels of psychological distress (Global Severity Index, Positive Symptom Distress Index, and Positive Symptom Total) of teachers in the experimental group as compared to teachers in the control group.</p> <p>Significant differences were also found between scores before and after treatment in all the dimensions that evaluate psychological distress (somatization, interpersonal sensitivity, hostility, obsessive-compulsion, depression, anxiety, psychosis, phobic anxiety and paranoid ideation)</p> <p>Techniques that focus on acceptance of private events and not on attempting to control them appeared to be useful to teachers.</p>
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12	2010	Gold, Smith, Hopper, Herne, Tansey & Hulland. (United Kingdom) Mindfulness-Based Stress Reduction (MBSR) for Primary School Teachers	Explore the impact of the MBSR programme in being able to reduce teacher stress and promote mindful practices, both with the teachers themselves, as well as imparting these practices onto the students in the classroom using child-focused methods	Pre-test post-test design N = 11 Sample consisted of teachers recruited from local suburban schools	MBSR <ul style="list-style-type: none"> • Total: 8 weeks 2.5hrs sessions/ week, • Additional 5 hour silent retreat between 5th and 6th week. 45 minutes a day/6 days a week practicing methods learnt in class	<ul style="list-style-type: none"> • Depression Anxiety Stress Scale (DASS 21) • The Global Problem Scale item from the Fear Questionnaire • Kentucky Inventory of Mindfulness Skills (KIMS). 	<p>Improvements on depression and stress were significant for depression ($p = 0.02$) and stress ($p = 0.05$).</p> <p>One of the four factors of the KIMS (Acceptance without judgment) significantly increased.</p> <p>General outcomes include “personal wellbeing, reduction in mental health difficulties, achievement of personally relevant goals, and enhanced ability to cope with demands of teaching in a modern primary school” (p.189)</p>
13	2008	Pouline, Mackenzie, Soloway, Karayolas (Canada) Mindfulness training as an evidenced-based approach to reducing stress and promoting well-being among human services professionals	Intervention was to equip teacher trainees with practical skills to support them during stressful times throughout their careers	Random Control Trial N= 34 Intervention (n=28) Control (n=16) Sample of teacher trainees	MBWE (bMBSR) <ul style="list-style-type: none"> • 8 weeks (no further details provided) 	<ul style="list-style-type: none"> • Kentucky Inventory of Mindfulness Skills • Kessler 10 Psychological Distress Scale • Satisfaction with Life Scale • Teacher's Sense of Efficacy Scale Self-rated health measure 	<p>Teacher trainees in the intervention group experienced significantly greater increases than the control group for two facets of the KIMS (Observing and Acting with Awareness)</p> <p>Self-reported positive personal and professional outcomes – staying in the moment and letting go of the past. Participants felt students benefited from their mindfulness training</p>

14	2004	Napoli Mindfulness Training for Teachers: A Pilot Program	Explore how the practice of mindfulness affected the teachers' behavior and perception with their students and in their personal lives.	Qualitative interview feedback from N= 3 Sample of elementary school teachers	Mindfulness programme <ul style="list-style-type: none"> 45min-bimonthly mindfulness training with students in classroom over nine months Total: 8 weeks 2.5 hr sessions/week 	<ul style="list-style-type: none"> Themes extrapolated from 1.5hr semi-structured interview sessions with teachers 	Outcome themes (a) Curriculum aid changes, <ul style="list-style-type: none"> prepare syllabus material, enhance creativity teaching techniques, and prioritize curriculum content (b) Dealing with conflict and anxiety through the breath, <ul style="list-style-type: none"> deal with conflict and anxiety in the classroom, assist children to relax and focus, particularly before tests, and help children direct and focus their attention (c) Changes in the classroom, <ul style="list-style-type: none"> utilise mindfulness techniques, such as body scan, as a means of centering, and implement change in the classroom by using simple mindfulness activities with the children in class (d) improved quality of personal life reduce stress and live with more awareness in their personal lives, enhancing general quality of life by decreasing multitasking and focusing on single tasks
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15.	2016	<p>Taylor & Harrison & Haimovitz & Oberle & Thomson & Schonert-Reichl & Roeser</p> <p>Examining Ways That a Mindfulness-Based Intervention Reduces Stress in Public School Teachers: a Mixed-Methods Study</p>	<p>Examine four potential ways by which the MBI reduced teacher stress, including (1) increasing their efficacy for regulating emotion on the job; (2) improving their ways of coping with stress at work; (3) increasing their efficacy for forgiving colleagues and students at work following conflict, as well as the tendency to do so; and (4) increasing teachers' tendency to feel compassion for people generally, and for challenging students in particular.</p>	<p>Mixed-method, pre/post/follow-up, randomized waitlist control design</p> <p>Public school teachers (n=59) were randomized to an MBI or a waitlist control condition</p> <p>treatment (n = 26) or waitlist control conditions (n = 30)</p> <p>Completed surveys at pre/post/follow-up and interviews at post-program designed to assess their coping with work stressors and their appraisals of their most challenging students</p>	<p>Mindfulness training program was 9 weeks in duration and included 11 separate sessions for 36 total contact hours</p>	<p>Program Evaluation Survey</p> <p>Outcome Measures Survey Survey items assessed teachers' occupational stress, efficacy for regulating emotions while at work, disposition toward compassion, disposition for forgiving others, and efficacy for forgiving others at work.</p> <p>Occupational Stress</p> <p>Efficacy for Regulating Emotion at Work</p> <p>Santa Clara Brief Compassion Scale</p> <p>Dispositional and Situation-Specific Forgiveness</p> <p>Efficacy for Forgiving Others at Work</p> <p>One-on-one interviews conducted at post-program were used to assess the sequence of psychological states teachers reported going through as they coped with a job stressor.</p>	<p>Efficacy beliefs and the tendency to forgive changed from pre/post for teachers in the MBI, and partially mediated reductions in stress from baseline to 4-month follow-up. Interview results showed a trend for teachers in the MBI to report more adaptive strategies for coping with job stress, and a tendency to evaluate challenging students in a more positive affective light.</p> <p>In general, results of the study supported the hypothesis that mindfulness training cultivates these kinds of social-emotional skills in teachers (based on teacher interview and survey measures) and that certain of these skills partially explain the stress-reducing outcomes of mindfulness training for teachers. Specifically, we found evidence that various aspects of (1) emotion regulation and (2) prosocial tendencies like compassion and forgiveness changed as a function of the mindfulness training and helped to reduce stress.</p>
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16.	2016	Schussler & Jennings & Sharp & Frank Improving Teacher Awareness and Well-Being Through CARE: a Qualitative Analysis of the Underlying Mechanisms	identify ways to support teachers' internal capacities for managing stress and promoting well-being we examined if/how the CARE intervention affected teachers' awareness and analyzed why CARE affected particular aspects of teachers' physical and emotional health and why some aspects were not affected.	Qualitative data consisted of transcripts from four focus groups (noted as BFG#^*) of three to eight participants each. Purpose = teachers' perspectives as to how and why particular outcomes showed effects and why some outcomes did not show effects. 50 teachers	Program components include three broad categories: (1) emotion skills instruction (40 %), (2) mindfulness and stress reduction (40 %), and (3) compassion practice (20 %). 30 contact hours in total, which took place in four day-long sessions over an approximately 6-week period. In between sessions, participants received coaching calls on the phone. A booster session was provided approximately 2 months after the fourth session.	<ul style="list-style-type: none"> Quantitative measures from the randomized control trial (i.e., general well-being, teacher efficacy, teacher burnout, mindfulness), Doesn't state which measures 	Participants developed greater self-awareness, including somatic awareness and the need to practice self-care. Participants also improved their ability to become less emotionally reactive. However, participants were less likely to explicitly articulate an improvement in their teaching efficacy. Implications for professional development are discussed. Significant results for -Observing -Non-reactivity -Summary score
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APPENDIX I: BRIEF DESCRIPTION OF A MINDFULNESS-BASED STRESS REDUCTION-TYPE PROGRAMME

Kabat-Zinn (2013) developed the Mindfulness-Based Stress Reduction (MBSR) clinical programme in 1979, which is a branch of medicine known as mind-body and integrative medicine, and which is offered at the Stress Reduction Clinic at the University of Massachusetts Medical Centre in Worcester, Massachusetts (US). While the programme draws on ancient Buddhist philosophies it remains secular in orientation (Chiesa & Malinowski, 2011). The MBSR programme is for anyone seeking emotional balance, self-development, learning and healing as a means to regain control of their health and peace of mind. While MBSR does not offer a replacement to mainstream medical practice, it does complement possible medical treatments in a vitally important manner, which is through how to practice self-care. This programme is a rigorous and structured form of mindfulness training. It is, according to Kabat-Zinn (2013):

A systematic approach to developing new kinds of agency, control, and wisdom in our lives, based on our inner capacity for paying attention and on the awareness, insight, and compassion that naturally arise from paying attention in specific ways. (p. xlix)

The MI employed and applied with the teachers in this study is closely associated with the traditional MBSR programme first developed by Kabat-Zinn.

To elucidate the concept, a description of a formal MBSR programme is included in bullet points below to explain the type of structure such a programme might entail.

Structure of a formal MBSR programme

- The programme runs over eight consecutive weeks.
- Weekly group sessions (2.5-3.5 hours in duration) and an additional half-day (7.5 hours of mindfulness practice) between session six and seven.
- The programme is comprised of 'Formal' and 'Informal' meditative methods.
 - o Formal Mindfulness Meditation Methods include: body-scan meditation (a supine meditation), gentle Hatha Yoga

(practiced with mindful awareness of the body), sitting meditation (mindfulness of breath, body, feelings, thoughts, emotions, and choiceless awareness), and walking meditation.

- Informal Mindfulness Meditation Practices (mindfulness in everyday life) include: awareness of pleasant and unpleasant events, awareness of breathing, deliberate awareness of routine activities and events such as: eating, weather, driving, walking, awareness of interpersonal communications.
- Participants are encouraged to complete daily home assignments, which include a minimum of 45 minutes per day of formal mindfulness practice and 5-15 minutes of informal practice, for 6 days per week for the duration of the programme.
- Based on the homework assignments and group activities, individual and group dialogue and inquiry is encouraged, as well as an exploration of experienced hindrances to mindfulness and how one can develop and integrate mindfulness-based self-regulatory skills and capacities.

APPENDIX J: SCHOOL CONTEXT

The context of this study was, in part, determined by the decisions the researcher took in developing the research design, which included the practicability of recruiting 8-12 teachers on a voluntary basis at a single school. In searching for a school on this basis, the mindfulness intervention was pitched as a staff development opportunity for all interested educational staff, irrespective of the teaching environment, creed or culture of the prospective staff member. Given this, it may appear that context is irrelevant to the study. However, the researcher decided to incorporate some background information about the school because this study recruited all its participants from one school. What follows is a description of the context in which the study participants work, and with which some of the qualitative data can be better understood.

The study was conducted with a group of staff members at an elite private faith-based school in the Western Cape of South Africa (hereinafter 'the school'). It serves children from pre-preparatory (age 3) to Grade 12 (age 18). The school prides itself on its mission statement, which emphasises values, lifelong learning and leadership. The core values promoted at the school are respect, integrity, compassion and accountability.

The school aims to maintain a high academic standard and is affiliated to the Independent Examinations Board (IEB). From early preparatory school, the school's approach is to cultivate a culture of critical thinking and to develop deep, qualitative thinking habits and traits in its learners. The school claims to focus not only on how a student produces knowledge, but also in the way the student is able to reproduce it. Similarly, emphasis is placed on the process of learning, and not the product of learning. Although the school assesses and reports in the traditional ways, they believe that they go a step further in assessing and reporting on whole-child development. The school's academic approach encourages learning beyond the core curriculum, with enrichment and extension programmes for students to apply concepts that they learn in real life scenarios and consolidate key learning. Given that the school promotes an ethos of academic excellence, teachers are recruited to inspire the best in their students, and to maintain a high academic teaching standard.

The school presently employs between 75 and 80 staff members, including support staff such as educational psychologists and social workers. Each class does not exceed a maximum of 25 students per class, and most grades have three classes.

APPENDIX K: ETHICS APPROVAL

ETHICAL CLEARANCE



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Approval Notice New Application

14-Jun-2016
Colarossi, Claudia CR

Proposal #: SU-HSD-002675

Title: Exploring the role of mindfulness in supporting teachers in a South African school.

Dear Mrs Claudia Colarossi,

Your **New Application** received on **19-May-2016**, was reviewed
Please note the following information about your approved research proposal:

Proposal Approval Period: **14-Jun-2016 -13-Jun-2017**

General comments:

The researcher is requested to ensure that she adheres to the stipulations/comments made by the DESC in the DESC report.
The researcher is further advised to consider translating the informed consent forms into Afrikaans to accommodate participants who may prefer receiving information about the project in their home language.

Please take note of the general Investigator Responsibilities attached to this letter. You may commence with your research after complying fully with these guidelines.

Please remember to use your **proposal number** (SU-HSD-002675) on any documents or correspondence with the REC concerning your research proposal.

Please note that the REC has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

Also note that a progress report should be submitted to the Committee before the approval period has expired if a continuation is required. The Committee will then consider the continuation of the project for a further year (if necessary).

This committee abides by the ethical norms and principles for research, established by the Declaration of Helsinki and the Guidelines for Ethical Research: Principles Structures and Processes 2004 (Department of Health). Annually a number of projects may be selected randomly for an external audit.

National Health Research Ethics Committee (NHREC) registration number REC-050411-032.

We wish you the best as you conduct your research.

If you have any questions or need further help, please contact the REC office at 218089183.

Included Documents:

DESC Report

REC: Humanities New Application

Sincerely,

Clarissa Graham

REC Coordinator

Research Ethics Committee: Human Research (Humanities)

APPENDIX L: STATISTICAL RELIABILITY RESULTS (TABLE 17-

Table 17: CTSS (Disengagement)

Alpha and 95% CI calculated in R=0.61(0.00, 0.85) Summary for scale: Mean=17.5455 Std.Dv.=2.21955 Valid N:22 (Spreadsheet Cronbach alpha: .612771 Standardized alpha: .654058 Average inter-item corr.: .335811						
variable	Mean if deleted	Var. if deleted	Stdv. if deleted	Itm-Totl Correl.	Squared Multp. R	Alpha if deleted
Question1(reversed)	13.14	2.48	1.58	0.58	0.46	0.38
Question7(reversed)	13.23	3.18	1.78	0.17	0.04	0.75
Question19(reversed)	13.00	3.27	1.81	0.52	0.34	0.49
Question23(reversed)	13.27	3.02	1.74	0.43	0.31	0.52

Table 18: CTSS (Indifference)

Alpha and 95% CI calculated in R=0.81(0.56, 0.92) Summary for scale: Mean=17.1364 Std.Dv.=2.71320 Valid N:22 (Spreadsheet Cronbach alpha: .806822 Standardized alpha: .825411 Average inter-item corr.: .558155						
variable	Mean if deleted	Var. if deleted	Stdv. if deleted	Itm-Totl Correl.	Squared Multp. R	Alpha if deleted
Question2(reversed)	12.73	4.11	2.03	0.73	0.64	0.71
Question12(reversed)	12.64	4.50	2.12	0.75	0.67	0.72
Question14(reversed)	12.95	3.95	1.99	0.59	0.45	0.78
Question18(reversed)	13.09	4.26	2.07	0.50	0.30	0.83

Table 19: CTSS (Separation)

Alpha and 95% CI calculated in R=0.86(0.66, 0.93) Summary for scale: Mean=17.4545 Std.Dv.=2.97173 Valid N:22 (Spreadsheet) Cronbach alpha: .859477 Standardized alpha: .873085 Average inter-item corr.: .640147						
variable	Mean if deleted	Var. if deleted	Stdv. if deleted	Item-Totl Correl.	Squared Multp. R	Alpha if deleted
Question3(reversed)	13.00	5.00	2.24	0.81	0.68	0.78
Question5(reversed)	13.05	5.95	2.44	0.65	0.43	0.85
Question10(reversed)	13.18	4.15	2.04	0.69	0.48	0.85
Question22(reversed)	13.14	4.75	2.18	0.77	0.65	0.80

Table 20: CTSS (Mindfulness)

Alpha and 95% CI calculated in R=0.32(0.00, 0.63) Summary for scale: Mean=15.6364 Std.Dv.=2.30001 Valid N:22 (Spreadsheet) Cronbach alpha: .321877 Standardized alpha: .274722 Average inter-item corr.: .088051						
variable	Mean if deleted	Var. if deleted	Stdv. if deleted	Item-Totl Correl.	Squared Multp. R	Alpha if deleted
Question4	11.91	3.08	1.76	0.23	0.07	0.17
Question9	11.50	4.07	2.02	0.13	0.14	0.30
Question13	12.09	2.36	1.53	0.28	0.12	0.09
Question21	11.41	4.42	2.10	0.03	0.09	0.38

Table 21: CTSS (Kindness)

variable	Alpha and 95% CI calculated in R=0.73(0.35, 0.96) Summary for scale: Mean=17.8182 Std.Dv.=2.36314 Valid N:22 (Spreadsheet) Cronbach alpha: .732817 Standardized alpha: .795229 Average inter-item corr.: .539981					
	Mean if deleted	Var. if deleted	Stdv. if deleted	Item-Totl Correl.	Squared Multp. R	Alpha if deleted
Question6	13.14	3.66	1.91	0.64	0.83	0.64
Question8	13.55	3.07	1.75	0.40	0.21	0.78
Question16	13.23	3.27	1.81	0.83	0.89	0.55
Question24	13.55	3.07	1.75	0.45	0.60	0.73

Table 22: CTSS (Common Humanity)

variable	Alpha and 95% CI calculated in R=0.43(0.00, 0.72) Summary for scale: Mean=16.8182 Std.Dv.=1.96726 Valid N:22 (Spreadsheet) Cronbach alpha: .425056 Standardized alpha: .454524 Average inter-item corr.: .184201					
	Mean if deleted	Var. if deleted	Stdv. if deleted	Item-Totl Correl.	Squared Multp. R	Alpha if deleted
Question11	12.45	1.79	1.34	0.63	0.49	0.00
Question15	12.32	2.67	1.63	0.28	0.37	0.33
Question17	12.41	2.88	1.70	0.08	0.26	0.50
Question20	13.27	2.56	1.60	0.08	0.11	0.54

Table 23: CTSS Full Scale

Alpha and 95% CI calculated in R=0.86(0.73, 0.92) Summary for scale: Mean=25.6023 Std.Dv.=2.82912 Valid N:22 (Spreadsheet i Cronbach alpha: .863943 Standardized alpha: .860151 Average inter-item corr.: .541930						
variable	Mean if deleted	Var. if deleted	Stdv. if deleted	Itm-Totl Correl.	Squared Multp. R	Alpha if deleted
compassion(Disengagement)	21.22	5.55	2.36	0.70	0.65	0.83
compassion(Indifference)	21.32	5.12	2.26	0.69	0.78	0.83
compassion(Separation)	21.24	4.50	2.12	0.85	0.83	0.80
compassion(Mindfulness)	21.65	5.96	2.44	0.50	0.63	0.87
compassion(Kindness)	21.15	5.20	2.28	0.80	0.67	0.82
compassion(Common Humanity)	21.40	6.36	2.52	0.43	0.37	0.87

Table 24: FFMQ (Observe)

Alpha and 95% CI calculated in R=0.67(0.42, 0.81) Summary for scale: Mean=27.2727 Std.Dv.=3.89361 Valid N:22 (Spreadsheet Cronbach alpha: .668353 Standardized alpha: .674051 Average inter-item corr.: .219346						
variable	Mean if deleted	Var. if deleted	Stdv. if deleted	Itm-Totl Correl.	Squared Multp. R	Alpha if deleted
Question1	24.36	11.14	3.34	0.57	0.61	0.59
Question6	24.14	10.85	3.29	0.46	0.27	0.61
Question11	23.95	10.68	3.27	0.36	0.34	0.64
Question15	23.77	10.72	3.27	0.68	0.67	0.57
Question20	23.86	10.85	3.29	0.45	0.58	0.61
Question26	23.55	11.25	3.35	0.39	0.65	0.63
Question31	23.73	13.83	3.72	-0.01	0.34	0.72
Question36	23.55	13.52	3.68	0.09	0.53	0.69

Table 25: FFMQ (Describe)

Alpha and 95% CI calculated in R=0.82(0.65, 0.89) Summary for scale: Mean=28.3636 Std.Dv.=4.35940 Valid N:22 (Spreadsheet i Cronbach alpha: .820306 Standardized alpha: .815325 Average inter-item corr.: .386411						
variable	Mean if deleted	Var. if deleted	StdV. if deleted	Itm-Totl Correl.	Squared Multp. R	Alpha if deleted
Question2	24.64	13.50	3.67	0.74	0.65	0.77
Question7	24.77	13.81	3.72	0.81	0.76	0.77
Question12(reversed)	24.68	12.67	3.56	0.70	0.75	0.77
Question16(reversed)	24.82	13.15	3.63	0.65	0.67	0.78
Question22(reversed)	24.68	17.85	4.23	-0.03	0.26	0.86
Question27	24.77	15.90	3.99	0.35	0.44	0.82
Question32	25.14	13.39	3.66	0.60	0.57	0.79
Question37	25.05	13.68	3.70	0.57	0.57	0.80

Table 26: FFMQ (Nonjudge)

Alpha and 95% CI calculated in R=0.93(0.82, 0.96) Summary for scale: Mean=26.4545 Std.Dv.=6.26196 Valid N:22 (Spreadsheet Cronbach alpha: .925969 Standardized alpha: .926058 Average inter-item corr.: .622618						
variable	Mean if deleted	Var. if deleted	StdV. if deleted	Itm-Totl Correl.	Squared Multp. R	Alpha if deleted
Question3(reversed)	23.59	30.06	5.48	0.69	0.74	0.92
Question10(reversed)	23.36	27.41	5.24	0.82	0.81	0.91
Question14(reversed)	22.82	30.42	5.52	0.69	0.66	0.92
Question17(reversed)	23.45	28.52	5.34	0.74	0.67	0.92
Question25(reversed)	23.09	27.63	5.26	0.81	0.73	0.91
Question30(reversed)	22.82	28.15	5.31	0.80	0.76	0.91
Question35(reversed)	22.95	29.50	5.43	0.69	0.68	0.92
Question39(reversed)	23.09	29.99	5.48	0.74	0.61	0.92

Table 27: FFMQ (Nonreact)

Alpha and 95% CI calculated in R=0.78(0.42, 0.86) Summary for scale: Mean=22.1818 Std.Dv.=3.31858 Valid N:22 (Spreadsheet) Cronbach alpha: .777778 Standardized alpha: .773053 Average inter-item corr.: .344856						
variable	Mean if deleted	Var. if deleted	Stdv. if deleted	Item-Totl Correl.	Squared Multp. R	Alpha if deleted
Question4	18.95	8.59	2.93	0.38	0.41	0.77
Question9	19.00	7.00	2.65	0.64	0.53	0.72
Question19	18.77	8.63	2.94	0.38	0.33	0.77
Question21	18.55	8.79	2.97	0.34	0.25	0.78
Question24	19.32	8.40	2.90	0.41	0.53	0.77
Question29	19.05	7.59	2.75	0.56	0.58	0.74
Question33	19.45	7.07	2.66	0.82	0.75	0.68

Table 28: FFMQ (Act with Awareness)

Alpha and 95% CI calculated in R=0.94(0.88, 0.96) Summary for scale: Mean=27.0455 Std.Dv.=6.19122 Valid N:22 (Spreadsheet) Cronbach alpha: .935376 Standardized alpha: .936616 Average inter-item corr.: .677453						
variable	Mean if deleted	Var. if deleted	Stdv. if deleted	Item-Totl Correl.	Squared Multp. R	Alpha if deleted
Question5(reversed)	24.14	29.48	5.43	0.69	0.78	0.93
Question8(reversed)	23.68	28.85	5.37	0.86	0.89	0.92
Question13(reversed)	23.73	24.83	4.98	0.92	0.89	0.92
Question18(reversed)	23.68	26.40	5.14	0.92	0.91	0.92
Question23(reversed)	23.55	29.98	5.47	0.60	0.47	0.94
Question28(reversed)	23.64	27.96	5.29	0.78	0.68	0.93
Question34(reversed)	23.50	29.52	5.43	0.65	0.59	0.94
Question38(reversed)	23.41	29.15	5.40	0.82	0.79	0.92

Table 29: FFMQ Full Scale

Alpha and 95% CI calculated in R=0.61(0.09, 0.76) Summary for scale: Mean=16.8109 Std.Dv.=1.96872 Valid N:22 (Spreadsheet in Cronbach alpha: .614593 Standardized alpha: .593383 Average inter-item corr.: .254040						
variable	Mean if deleted	Var. if deleted	Stdv. if deleted	Item-Totl Correl.	Squared Multp. R	Alpha if deleted
FFMQ(Observe)	13.40	2.45	1.56	0.69	0.54	0.43
FFMQ(Describe)	13.27	3.62	1.90	-0.10	0.08	0.75
FFMQ(Nonjudge)	13.50	1.82	1.35	0.63	0.57	0.38
FFMQ(Nonreact)	13.64	3.11	1.76	0.23	0.27	0.62
FFMQ(Act with Awareness)	13.43	1.98	1.41	0.54	0.47	0.45

APPENDIX M: CTSS PRE-POST QUESTIONNAIRE SCORES

COMPASSION) SCALE) QUESTION) NUMBER	PERSON'1' PRE)TEST	PERSON'1' POST)TEST	PERSON'2' PRE)TEST	PERSON'2' POST)TEST	PERSON'3' PRE)TEST	PERSON'3' POST)TEST	PERSON'4' PRE)TEST	PERSON'4' POST)TEST	PERSON'5' PRE)TEST	PERSON'5' POST)TEST	PERSON'6' PRE)TEST	PERSON'6' POST)TEST	PERSON'7' PRE)TEST	PERSON'7' POST)TEST	PERSON'8' PRE)TEST	PERSON'8' POST)TEST	PERSON'9' PRE)TEST	PERSON'9' POST)TEST	PERSON'10'' PRE)TEST	PERSON'10'' POST)TEST	PERSON'11'' PRE)TEST	PERSON'11'' POST)TEST
1	2	1	2	4	2	1	1	1	2	1	1	1	1	1	3	2	3	2	1	1	1	1
2	2	2	3	4	1	1	1	2	2	2	1	1	1	1	2	2	1	1	1	1	2	1
3	3	2	3	3	1	1	1	1	1	1	1	1	1	2	3	2	1	1	1	2	1	1
4	4	4	3	3	2	2	3	4	5	5	4	5	4	2	5	4	3	4	2	4	5	5
5	2	2	3	3	1	2	1	1	2	2	2	1	1	1	2	2	1	1	2	1	1	1
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21	5	4	4	3	5	4	5	5	4	5	5	3	4	3	5	4	4	5	4	3	4	5
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23	3	2	2	3	1	1	1	1	2	3	1	1	1	1	2	2	2	3	2	2	1	1
24	4	4	3	4	5	5	5	5	4	4	5	5	5	4	5	1	4	4	4	5	5	5

APPENDIX N: FFMQ PRE-POST QUESTIONNAIRE SCORES

FFMQ QUESTION NUMBER	PERSON 1 PRE-TEST	PERSON 1 POST- TEST	PERSON 2 PRE-TEST	PERSON 2 POST- TEST	PERSON 3 PRE-TEST	PERSON 3 POST- TEST	PERSON 4 PRE-TEST	PERSON 4 POST- TEST	PERSON 5 PRE-TEST	PERSON 5 POST- TEST	PERSON 6 PRE-TEST	PERSON 6 POST- TEST	PERSON 7 PRE-TEST	PERSON 7 POST- TEST	PERSON 8 PRE-TEST	PERSON 8 POST- TEST	PERSON 9 PRE-TEST	PERSON 9 POST- TEST	PERSON 10 PRE- TEST	PERSON 10 POST- TEST	PERSON 11 PRE-TEST	PERSON 11 POST- TEST
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39	2	3	2	2	3	3	2	2	5	1	3	3	3	2	4	3	2	2	3	2	3	3

APPENDIX O: PORTION OF TRANSCRIPT FROM FOCUS GROUP FEEDBACK**COLOUR CODING KEY FOR TRANSCRIBED DATA**

Theme	Subtheme
2.1. The Mindfulness Intervention	1.1.1. Organisation 1.1.2. Facilitation 1.1.3. Mindfulness practices
2.2. The Mindfulness Course as a tool for supporting teachers	2.2.1. Stress management 2.2.2. Presence 2.2.3. Listening 2.2.4. Compassion 2.2.5. Acceptance 2.2.6. Non-judgment
2.3. Introducing students to mindfulness	
2.4. Experience of completing the questionnaires	2.4.1. Reactions to questionnaires 2.4.2. Pre-and-post differences 2.4.3. Reflection
2.5. Motivation to complete the course	2.5.1. Commitment 2.5.2. Social desirability 2.5.3. Interest and curiosity 2.5.4. Convenience and affordability

8. What relevance did the questionnaires hold for you?	9. What went through your mind when completing the questionnaires, both before the programme commenced and then again after the programme?	10. Would you recommend this programme to other teachers? Please give reasons for your answers.	What motivated people to continue and not drop out?
<p>I've actually from what, let me rephrase that...on reflection I think I have seen a shift in the way I've dealt with myself and how I deal with other people and how I see other people. So in a way I think I am quite impressed with unclear: 00:55:16) evaluate where I've been, where I've come from and where I am. So I have unclear: 00:55:23).</p>	<p>As I said before I've noticed a shift in how I've answered the questions and how I've grown in compassion. Listening more and understanding that is what I've picked up.</p>	<p>I think it would definitely benefit everybody actually. I don't think the question particularly refers to this course but I've heard this course is one way of doing it. I also did a course that I would share with the group which Bronwyn did a mindfulness online course, like a massive online course which was super because it is quite different format although the information is much the same and maybe the expectation was slightly less on doing five minute meditation or ten minutes. So I think the nice thing about that was it's the same thing but a different format. You do it online and you do it on your own time rather than lectures, rather than meditation so it is little maybe more sound bites but yes mindfulness is fantastic.</p>	<p>The reason I wanted to continue was the fact that I keep on telling my girls when you take up a challenge you actually have to finish. No matter how hard it is now, you can't grade yourself and talk about perfection and how well I did, I can't say but I know I learned something. You know what I am saying? So I needed to finish for myself. So it was one of those, I think I have mentioned it before but I mean the fact that XX and YY were such great facilitators really made it easier. I am the type of person that I am a team player so I like it when we are all together we all do everything. It is a lot easier than trying to do it online. I've tried a couple of online courses and you know it really doesn't work for me. I like the whole sharing and we are all in it together and we are all learning from it in different levels. It is a point where we are all learning from each other, you know? I enjoyed that. The social dynamic is also important for me.</p>
<p>I think it has highlighted what we've actually been doing this last few weeks, the questions sort of drew out the issue we've been talking about. So that was the interesting thing and I found that would have been interested to know what I did last time. Where (unclear 00:55:42).</p>	<p>I find questionnaires fine and interesting to do and they are such an important things in life to me I think. So answering to what is the most interesting is just to reflect a little bit on where I was and am now.</p>	<p>I hear all the others restrictions, I like the smaller groups I think that that could work.</p>	<p>Especially with practice with the five minutes or one hour a day. I feel what everyone else has said and I think it was a great opportunity and it was easy access and I think we had the wonderful gift of XXX and YYY who were fantastic as well. So that really was a lucky thing that we did not miss out on XXX and YYY.</p>
<p>Initially when I filled in the first set I don't think I really thought about what I was answering. I was distinctively at it by immediately answering, this time around I actually thought a bit more about what these questions meant and so I think I was more mindful in answering these questions this time around.</p>	<p>First time around I was a monster it was a low point where I was thinking about just how burnt I was to do and filling it in today I felt genuine curiosity about where I was and I was really affirming to genuinely and wholeheartedly identify with the compassion and the emotional response in reaction stuff and that was really affirming that actually I can do this whole teaching thing [also red]</p>	<p>Yes definitely it has given me the tools to deal with my instinctive fight or flight reactions and I think if more teachers do this and have the same tools the kids would benefit from being in an environment where you have likeminded people with the same goals, working towards the same goal and that is to empower and like she said liberate these girls.</p>	<p>Curiosity. I realized I was busy growing and I was busy developing and evolving and so I was curious every time. I knew I needed guidance in this process. I knew that just doing the homework session was not enough for me, I needed to return. I felt safe in this environment and so I was looking forward to coming here. I enjoyed it very much. [also blue]</p>
<p>I have very similar things to what's already been said. By answering and recognizing what these things are in particular holding and not judging emotions. It felt really good to have had that breakthrough whereas before there is the immediate judgement of action taken when you feel an emotion but the distance and being able to...but I only realized it when I filled in the questionnaire. But this has been a very big step for me and I actually achieved it. I've done it and hadn't realized. So it was really positive filling in the questionnaire.</p>	<p>Well it is pretty much what I said but this time it was basically doing it for the sake of doing it and the second time around was more mindful.</p>	<p>Yes I think that it would be amazing for not only teachers but students to do it because it places the dignity of the human being up [also purple] (unclear: 01:12:38) rather than mark achievements and expectations but rather we are all people, we are learning skills together and first and foremost working them. I think that is very liberating especially for the high school perfectionists that we have where competition of being the best, being perfect are what they feel to be is expected of them. That they don't meet that expectation that there is a tremendous amount of judgement and I think that mindfulness would not necessarily disable those very long standing habits but would help them acknowledge or notice them and then choose for themselves. Like I would want an A in History because I want an A in History because it is going to make me feel good and I really love the subject or whatever. So really interrogating their motives of things and how they apportion value, so I think it is a save space for introspection and examining how is it that they use their time and energy. So I think it could be very valuable. I mean I am type A myself it is either perfect or it is a fail and so for me it has just really been an important moment that actually just showing up just isn't...</p>	<p>Partly like you just show up it is what you do. You meet your commitments, partly because I knew it was part of your Masters and I think coordinating data I won't be the person who made that difficult. Part of it was curiosity about the people in this group because I think I've got a chance to see the stresses for prep teachers, for like younger teachers at different stages in their live and there was chance to get real insight and understanding into people that I see walking around like I'm only seeing a really small portion of them and like KKK I hardly knew...look the first view is completely different of what I have now and so whilst still being a professional in terms of the boundaries that we respected I do feel like I understand people so much better now. So I came back because of curiosity, like what other things have I missed about the people around me? So that was one of them, the contributing factors.</p>

1. Can you describe your general impressions of the training?	2. What aspects did you find challenging?	3. What aspects did you find easy?	4. Can you describe some of the ways in which the tools or techniques that you've learnt have influenced your teaching?	5. How might the mindfulness practices you've learnt support you as a teacher?	6. Can you describe, if at all, whether the ways in which you relate to your students has changed since your participation in the programme?
Alright it was very comprehensive	I found the sensations in the body, understanding that and I didn't get it to be honest. I couldn't say where was I feeling a sensation and that I battled with. So the whole being in tune with the emotion and what sensation in the body, I couldn't say, I knew what the emotion was but not the sensation. I couldn't feel it.	I didn't find anything easy. What I also found quite easy is the mindfulness in your day to day practical life. So much easier to practice...just the noticing and living in the moment practical mindfulness in the present and things like that. That seems to come quite naturally, obviously if it becomes more it would be great to be in the present.	Within the lesson I could look at the way that I explain things and slow it down into bite sizes rather than trying to push through the work and hopefully they get to understand but at least this way you get more intentional about what you are saying and what you are going to...what the expectation is of what you are going to get out. I found that was quite mind-blowing for myself. I also looked at how I responded to various people in the groups that you cross, not all of them are listening and how you react and you can change the way you react rather to how you respond and you know, I don't seem to get annoyed as easily with those situations. Obviously it depends on how tired I am but yes I think it did help in that regard.	Going forward I agree with what QQQ said that we would like to, if you are less stressed you will have a far more impact, your teaching will have a far more impact. If I can get that across to my class, the classes that I am teaching and they in turn start realizing the calming effect of what I am doing and the whole mindfulness process where they can at least start feeling governed by their own, they could govern their own emotions and that is what I really would like them to do. So going forward that is what I would like to see them do and like FFF says how to calm themselves down before and exam, you know? Take control of the situation and emotions, regulate their emotions, deal with it and move on. I think there is a lot of benefit in that because I think as you've already mentioned their performances is really directly or indirectly affected by how they react emotionally. Anxiety is overruling everything, when performing exams or in life situations. That is what I'd like to see is how to get the girls to regulate their own emotions and that way it would be a strengthening of their own performances and who they are as people. [Also purple] Do you think that the mindfulness practice is a way of self-regulation? I think it is. I think it starts with us but I think we also need to as much as we are practicing calming in the class we need to come to the point where actually get to the point how they can actually get to do it themselves. To regulate themselves.	Like I previously said, think presently and listening but also with dealing with how you are going to respond. But only once you have heard what they said and I mean that is the hardest part but I think going forward definitely that, learning how to respond properly.
very thorough detailed and it was encouraging as well	but I have find that the amount of time were asked to meditate, a lot, I kind of wished in a way that we built up starting on ten minutes and built up, where we started with twenty five minute the first week, I think it was twenty five minutes we were asked to do, so that was the only think I found difficult.	I think that the X's and Y's warmth and acceptance nature has made it a very easy space and I enjoyed the meditations they did and walked us through. It was enjoyable.	I feel like my responses and reactions, I felt much more mindful or I feel more mindful about giving the children all the time they deserve instead of rushing home. Multitasking in a few ways. So just being more present in the moment and letting things go that are getting flustering to say let's just do this now and then we'll get onto that. So just being calmer and yes more centered on the children in a good way.	I feel that if mindfulness influences me as a person it is going to influence my everyday at school and if I can feel, if it helps me to feel calmer and reflect on lovely phrases in me like self-compassion and loving kindness or to use those is almost aspirational ways as being, I think that is very useful I find those phrases are very helpful to live within the framework and think about that kind of issues. I think that follows out with them as well.	I have to agree with being present in the moment to the girls' quite stands out and also not making a judgment, just trying to be open for it.
I felt very comfortable I never felt as though I was doing or expected to do something that I did not feel comfortable with.	Ditto, everything that is being said so far. I found the one specific meditation session, the befriending meditation session that was very difficult for me at the time in my life. I also found it the most useful actually of the whole lot. : It is on the frantic calls, I think it is the second class session, but I discovered it a week before we were supposed to do it. I discovered it at the right time in my life. : it was very difficult for me to actually really love through it and do it properly. But as I say it was a very valuable meditation.	Yes the group sessions and definitively the feeling of mutual respect and allowing people to say what came up and feeling safe in that environment.	Well I felt that I was definitely far more observant of their responses to the material. Often one rushes through the chunk of work that you have to do and so there is definitely being more use of force in my classes and just observing their reactions and allowing them a little bit more space for the work to settle in, whether it is literature or whatever it is that we are working with. So that was definitely, made me more observant to their responses to whatever academic work they are dealing with.	I regularly think class gets I didn't study for this test or you are not doing your best here or you're not coming to the party. I think I have learned and this is what I would like to take forward to try and create a safe environment for them where they do not feel judged. Where they want to perform to the best ability because they know there is no judgment here. Much to what QQQ said about all these different things, media and stuff that is going out there and how they perceive things. I would really like them to feel safe in that classroom environment	I think I am probably sensitive to not only what they say but how they say it and even those who doesn't speak. I think I am learning to be more quiet with myself to read them and then respond accordingly.
I found that the tips that they gave in terms of like how to understand the process and education very helpful and also the strategies on how to deal with everyday situations and releasing tension. So it was applicable to my life, easily applicable to my life as a teacher.	The entire process of sitting still I found very difficult. So mindful movement, mindful walking, mindfully washing dishes like that I can do much more easily but sitting still I can manage three minutes. So it was just about adapting to the program to what I could manage without getting like really restless.	the raisin meditation the, the flower meditation and mindful movement. Because then I can be mindful but not sit still. So I found that very easy.	It has made me a much calmer teacher and more present to the kids. So when I am in the classroom and having a discussion with one student or the class I make sure that I am fully focus on them and not thinking about other tasks that need to be done that day. So I am far more present and by focusing only on them I am less worried about the other things because I realized I have a greater deal of perspective now. So my time with the child is far more important than do I get my photocopies on time. Because I am a teacher I can go with plan B but I don't want to ruin this moment with the child. So I am far more careful and respectful and gentle with both myself and my students and then that three minute breathing space meditation was really helpful when classes would come in and they would be really stressed out because they've just written a test and they go their marks back, they weren't at all settled then I would begin the lesson by switching off the lights, okay everyone let's go through this meditation together and I play it and then we could start with the lesson. I was a much nicer way to calm them down than being 'ah sit settle down' lessons because that doesn't calm anyone down. So that was a really helpful practical tool. Yes especially with grade eights and nines and that three minute meditation session is really simple and even I can sit through it which means they can sit through it. So it was very doable and then sometimes they would ask for it as well.	Make me more calmer, more present and less tense and less stressed about covering the content which will then integrate the girls that the content are secondary, the skills are first. So helping them gain perspective by not having a stressed teacher.	More receptive so things that I would have missed I will now notice. More open in my kind of acceptance and them and none of them are wrong.